

A  
VISIT TO GROVE COTTAGE.



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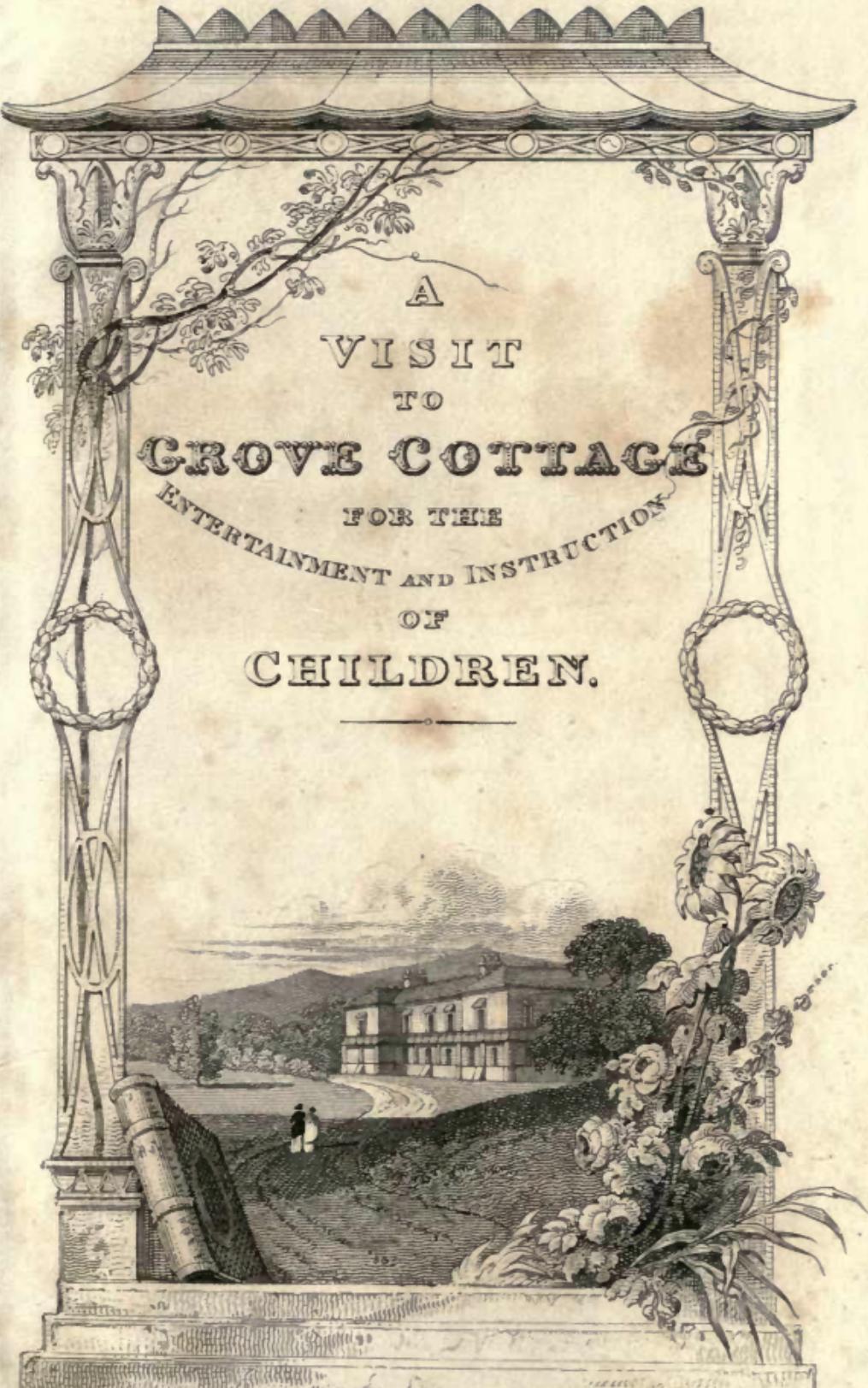
Collection of  
Children's Books











A  
VISIT  
TO  
**GROVE COTTAGE**  
FOR THE  
ENTERTAINMENT AND INSTRUCTION  
OF  
**CHILDREN.**

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A  
V I S I T

TO

G R O V E C O T T A G E.

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THE DEPARTURE.

“CAROLINE, my love, it is six o’clock!” said Mr. Somerset, as he knocked at the door of his little girl’s room, one fine morning in June. Caroline did not wait for a second summons, but exclaimed, in a more animated tone than is usual at so early an hour, “I shall be ready in a minute or two, papa;” and no sooner had the words passed her lips than she roused her sister Emily, who was still asleep, jumped out of bed,

and began to put on her shoes and stockings. "This delightful morning is come at last!" said she; "hark! do not you hear the chaise driving to the door?" and as she spoke she advanced towards the window, drew aside the curtains, and found that a stage waggon had attracted her attention. Presently, the wheels of a hackney coach were mistaken for those of her papa's gig; and soon after the bell of the dustman announced that his cart had deceived her.

But where were these little girls going? and why were they rising so early? and where did they live? our young readers are, perhaps, ready to inquire.

They shall hear.

Caroline and Emily Somerset were the daughters of a gentleman who resided in Russel Square. They had seldom been in the country, and the garden in the square was their principal walking place. Mr. Somerset was about to remove into the country, and, as his

family was large, he had purchased a commodious house in Worcestershire, whither he intended them to repair towards the latter end of the summer. But many alterations and improvements were wanting before it could be rendered fit for the family mansion, and he had his house in Russel Square on a lease, which was now nearly expired ; it was therefore agreed that the children should pay some long talked of visits in the interim.

Now those who have a clear comprehension, and can readily enter into family arrangements, may read the following page ; but those who cannot had better skip it, and save themselves any unnecessary trouble, as it certainly requires no common degree of attention duly to understand so many.

Mrs. Somerset herself, with her three youngest children and their nursemaids, were to repair to the house of her father, in the environs of Matlock, in the

course of a fortnight ; and Mr. Somerset, on the morning of which we have been speaking, was about to set out with Caroline and Emily for Grove Cottage, near the town of Egremont, in Cumberland, the residence of some particular friends of their parents, by whom they had been invited to spend a few months: a proposal which Mrs. Somerset gladly accepted, as she knew her daughters would reap advantages, of which, owing to their town residence, their having as yet had no governess, and her own delicate state of health, they had hitherto been deprived. It was the idea of this long journey that occasioned so much joy to the little girls, who, never having been far from home, anticipated it with eager expectation. As Mr. Somerset returned from the North, he was to take Matlock in his way, in order to see that Mrs. Somerset and her little flock were arrived in safety, and comfortably settled for the summer ; and his two eldest sons,

Edward and Augustus, were then to meet him in Birmingham, and be placed, for a short time, at a respectable academy. After having thus disposed of his family, he intended returning to London, to settle final arrangements there; and it was hoped that, in the course of three or four months, Aston Hall would be ready for the reception of the whole group, and so commodious as to admit of private tuition. Mrs. Somerset's health being delicate, and her domestic avocations numerous, she had not sufficient leisure to devote her time to the education of her children. She had therefore engaged a governess for the little girls, while Mr. Somerset proposed to take upon himself the tuition of his sons.

Having explained these new arrangements, we will return to Caroline and Emily, who were soon quickly dressed, and ran down into the parlour directly the bell was heard. "I must make

breakfast for you to-day, papa," said Caroline, drawing her chair to the table in great spirits. "Here is your cocoa."

At this moment a servant appeared at the door, informing them that the gig was ready. Caroline put down her cup, and Emily jumped up, exclaiming, "I really do not want any breakfast. I cannot take any cocoa. Where is your hat, my dear Caroline?—and where are my gloves? I knew we should not be ready in time, though we got up directly papa called us:—and we have not kissed mamma, nor the little ones."

"No such great haste, my dear," said Mr. Somerset, taking hold of his daughter's hand, and replacing her on her seat. "No little girl can be fit for a long journey, if she cannot eat a good breakfast before she sets out."

The children replaced themselves, at their father's request, but the thought of their ride took away their appetite, and before he had done they were out

of the room, now this way and now that, running up stairs to take leave of their mother, and then to the nursery to kiss the children, and were again skipping along the gallery, equipped in their straw hats and travelling plaids, when Mr. Somerset's voice was heard in the hall, and the names of Caroline and Emily were uttered. They scarcely needed the summons, but with light hearts and nimble steps tripped down stairs, and were soon seated in the chaise, each with a little basket in her lap. Mr. Somerset took the reins, and they were presently out of Russel Square. The morning was fine, and when they reached the environs of the city the sun began to shine with unusual brightness; the children were glad to leave the smoky streets, and to inhale the pure fresh air. The trees and hedges looked beautiful, being perfectly clothed in their mantle of green; the flowers of all sorts seemed to expand their petals

under the cheering rays of a warm sun ; the wild cherry unfolded its large white clusters of blossoms, and the blue ivy-leaved campanula enamelled the banks by the road side ; the little birds warbled their songs of gratitude and joy in full chorus, and gladness seemed to characterise every living thing.

Caroline and Emily admired all they saw—the trees—the parks—the fields—a rustic bridge, or the smoke from a cottage chimney, rising gracefully above the tall elms that surrounded it, by turns attracted their observation ; and, full of youthful glee, they accounted this the happiest day of their lives.

“ Look at that beautiful wreath of wild roses, Emily,” said Caroline, “ and at the woodbine—how delightfully it smells ! a hundred times sweeter than all the hyacinths we had in glasses at home, or than all the flowers in the garden at Russel Square.”

“ And look, papa, exclaimed Emily,

“at that pretty cottage yonder, with its ivy-covered porch, and the woman spinning at the door, and her children at play on the green—how happy they appear!—and look at the village spire peeping behind those tall trees!—hark! the bell is ringing. Oh! now we are come to a town—what town is this, papa?”

“This is Uxbridge,” said Mr. Somerset, “and here my young travellers must take another breakfast. I hope they will convince me that a ride of fifteen miles at so early an hour has done them good.”

Mr. Somerset drove to the inn, and when his little girls had made a hearty meal of toast and coffee, the chaise was again ordered, and they proceeded forwards.

The beautiful scenery between Uxbridge and Wycombe delighted them; their father pointed out the charming views, the smooth shaven lawns, the

elegant seats and waving woods with which it is interspersed; and in the evening tall towers, turrets, battlements and spires, apprised them of their approach to Oxford.

“We have left Middlesex and Buckinghamshire, and are now approaching the capital of Oxfordshire,” said Mr. Somerset, “the seat of learning, science, and art. Here many eminent characters, whose names adorn the roll of history, lived, and devoted their time to the acquisition of knowledge which has rendered their names immortal.”

As Mr. Somerset spoke, they crossed an elegant bridge over the river Isis, and advanced up High Street, which is said to be the finest street in Europe. It is wide and very long, and its sides are adorned by venerable colleges and noble edifices, which, having been founded for the generous purpose of promoting knowledge, display the triumph of learning with grateful magnificence.

The foliage of the tall trees belonging to the walks and gardens, intermixed with the buildings, and the collegians walking about in their long flowing robes and square caps covered with black cloth, give this celebrated city an air not only of grandeur, but also of picturesque beauty.

“Oxford is one of our universities,” continued their father, “and those gentlemen whom you remark, on account of their peculiar dress, are the students; some of their caps are ornamented with a tassel of gold, to distinguish them as the sons of noblemen.”

“What do you mean by a *University*, papa?” said Caroline.

“Universities, or colleges, are establishments instituted for the promotion of the arts and sciences,” replied Mr. Somerset. “We have only two universities in England: Oxford and Cambridge. In these institutions the whole extent of human learning is generally

taught, but chiefly philosophy, divinity, physic, law, and the learned languages."

We shall have time to walk about a little to-morrow, as I do not intend proceeding till the next day, and I will take you to see some of the colleges.

But as we have not room to describe all they saw, the numerous public edifices they visited, the delightful walks in which they rambled, &c., we shall proceed to the day appointed for them to leave this interesting city.

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#### THE JOURNEY.

The chaise was ordered at an early hour on Wednesday morning, as Mr. Somerset was anxious to reach Worcester, in order to devote the following day to some arrangements respecting Aston Hall.

Caroline and Emily were, contrary to their usual custom, as quickly dressed

as they had been on the two preceding days, and set off with renewed vigour after a comfortable night's rest. Fresh objects continually attracted their attention, and, after a delightful ride through Blenheim Park, the seat of the Duke of Marlborough, and passing through two or three little towns, they reached the brow of a long hill, called Broadway Hill, in the afternoon. Here an extensive view presented itself—a wide tract of champaign country opened before them; the Malvern Hills were distinctly seen in the distance, the rich vale of Evesham, famed for its fertility, and the little town of Broadway lay below them. As they travelled through this beautiful country, Caroline was delighted with the numerous orchards of apple and pear-trees on each side of the road; and her father remarked that Worcestershire is famous for its cyder and perry, which are made from the juice of these fruits. Emily admired the

beautiful hop-yards: in which enclosures long poles are fixed into the ground in rows. Each separate plant has a pole, up which it creeps, and having reached the top, falls down in curly tresses. "The fruit hangs in little clusters, and is of a leafy substance, about the size of an acorn," said Mr. Somerset. "I hope you will see a hop-yard in the time of vintage."

"What do you mean by that, papa?"

"I mean at the time when the hops are ripe, and ready for picking. You would be much amused to see thirty or forty children, about your own age, and men and women too, as busy as possible picking them from their tender stalks. The men cut them off at the root, and the rest pick and collect them together, which they do into their little blue aprons, and then empty them altogether into large baskets."

"But of what use are hops, papa?"

"They are used in the making of

beer, and impart that bitter flavour to which you have such a dislike," replied Mr. Somerset.

The evening of the second day after leaving Oxford was far advanced, when our party entered the wide and neatly paved streets of Worcester. The children were really sleepy, though unwilling to own it, and being soon placed in a comfortable bed, sunk into a sound slumber. Their father thought it best not to disturb them too early the next morning, after the fatigue they had undergone on the preceding day: he therefore left them under the care of their hostess, and rode over to Aston Hall while they were still asleep.

Towards eleven o'clock he returned to the inn, and found them waiting in anxious expectation for his arrival.

"Well, my little girls," said he, "are you ready to take a walk in the city? What object presents most attractions? What do you wish to see first?"

“Aston Hall! Aston Hall, papa!” exclaimed Emily, in a lively tone; “cannot you take us to Aston Hall? We used to see plenty of shops, and churches, and public buildings, and such like places in London; I would much rather go to Aston Hall. I want to fix upon a border for my own little garden, and to see the green-house; I wonder whether there are any geraniums in it—I am so fond of geraniums. How charming it will be to live in the country!”

“Provided we have a green-house and some geraniums in it, Emily,” said her father.

“Oh no, papa, I do not mean that my pleasure will depend upon them alone, but you know it will be so delightful to have a green-house! and mamma says, that she will give us each a little green watering-pot, and that we shall take care of her plants. Caroline, what do you wish to see?”

“I have sometimes heard mamma

say that our tea-things came from Worcester, and that Worcester is famous for its china ; and though I want to see Aston Hall as much as Emily does, I would rather see a china manufactory.”

“ Now, how shall the matter be decided upon?” said Mr. Somerset; “ I will leave it to you to settle it between yourselves.”

The two little girls looked at each other, as though each ardently bent on seeing the object she had in view. However, good-humour prevailed, and with an amiable condescension each offered to give up her own project and accede to that of her sister.

“ I will go to Aston Hall, if you please, my dear Emily,” said Caroline. “ I want to see the garden and the green-house as much as you do, and perhaps we shall be able to see the china manufactory another time.”

“ No, no, no !” replied Emily, with generous warmth ; “ you are older than

I am, and I will go wherever you like. Papa, we wish to see how cups and saucers are made."

"Then your wish shall be gratified, for I am always pleased to meet with an opportunity of rewarding good temper," said Mr. Somerset, taking the hand of each of his little girls, whose eyes sparkled with pleasure at this well-earned praise, and they proceeded along the streets of the elegant city of Worcester, towards Chamberlain's china manufactory.

On arriving at the place they were first shown a mill, resembling a bark-mill, in which the stones of which china is made are reduced to as fine a powder as possible.

Perhaps some of our young readers will exclaim, as Caroline and Emily did,—"What! is china made of stones?"—

It is nevertheless true: the composition of which our most beautiful sets of china are formed is made of two dif-

ferent sorts of stone powdered and mixed together with water. The surprising dexterity with which a man formed cups and saucers, basons, &c. of this paste, amused the children exceedingly; he put a little lump of it upon an instrument called a wheel, and then gave it a turn, shaping the vessel at the same time with his hand, when it seemed to spring up instantaneously, as if by magic. Another workman then took it in hand, and turned it round on a wheel in the same manner as the other had done, only scraping it with a knife where it was too thick. The vessel was by this time ready for baking, for which purpose it was put into a mould, and when nearly hard was taken out of the oven, and dipped into a thin liquid, which looked, as Emily said, like white-wash, and which was done to give it that varnished appearance that it assumes after having been burnt once more, and renders it fit for painting. The children were next

shown to the painting room, where the novelty of the scene afforded much entertainment; one old man, with green spectacles on, was ornamenting a tea-cup with beautiful birds, and a pale-looking woman was painting a vase, upon which the flowers seemed to grow beneath her touch, while twenty or thirty people, stationed at little tables all round the sides of the room, were employed in a similar manner; they had all an unhealthy appearance, which showed that the confinement did not suit them. Mr. Somerset hastened his children from the close apartment devoted to this purpose, and told them that, when painted, the china would be again burnt to make the colours stand. Lastly, the gold, which had hitherto looked like yellow paint, would be burnished, that is, well rubbed, and the china would then be completed and ready for sale.

The little girls were much gratified

with inspecting this curious manufacture, for it was so entirely fresh, that novelty, which arrays all youthful pleasures in double lustre, added much to its interest. Emily said she no longer regretted not having seen Aston Hall; and Caroline said that she loved Emily better than ever, for the good temper she had shown in giving up her own wish to oblige her sister.

The chaise was ordered at an early hour the next morning, and our little party proceeded to Birmingham. No sooner had they entered this large and populous place, than the hammering of presses, the whirling of wheels, the clatter of engines, the rattling of coaches, the bustle in the streets, and the black smoke that poured in columns from the numerous furnaces, made them fancy they were again in London: and indeed it does bear a strong resemblance to some parts of the metropolis.

“This town,” said their father, “is

sometimes styled the grand toy-shop of Europe, and I intend staying a day or two in order to show you the various manufactures for which it is celebrated. The works that are carried on here are principally in iron, steel, and other metals, as well as glass and japan-ware. You will see children of your own age employed in making watch-chains, bracelets, necklaces, buttons, snuff-boxes and buckles, and using their little fingers with as much dexterity as you do in dressing your doll, or playing a game of drafts."

But as to describe minutely all our travellers saw would be tedious, and probably less interesting to our young readers than the manner in which they employed themselves when settled in the country, we shall not state the particulars of the numerous objects that attracted their attention; but suffice it to say, that after having gratified their curiosity in Birmingham, they proceeded

by short and easy stages until they arrived at the bustling and populous town of Manchester, a place famed for its cotton manufactories ; whence, after spending a day or two, they travelled forwards in excellent spirits, until high mountains topped with clouds, beautiful lakes, and romantic scenery, foretold that they were approaching the confines of Cumberland, and had already nearly reached the place of destination.

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#### THE ARRIVAL AT GROVE COTTAGE.

THE sun was declining behind the western mountains and tinging the trees with a yellow lustre, when our party, having passed through the little town of Egremont, proceeded along a delightful country until they came beneath a hill covered with thick wood, when Mr. Somerset stopped the chaise, and pointed through an opening to an elegant build-

ing, just seen in the distance, and apparently in the midst of pleasure grounds and gardens :

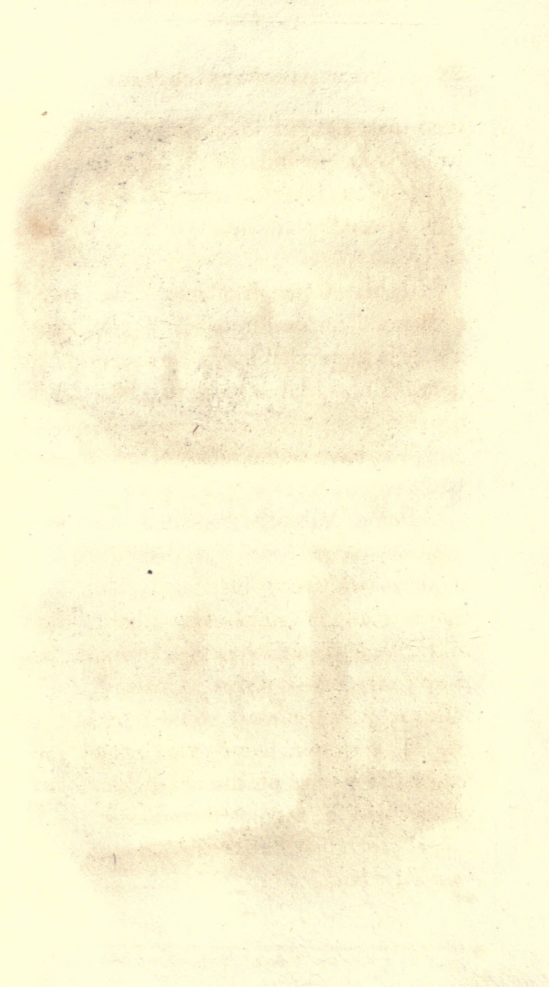
“ There,” said he, “ is Grove Cottage.”

“ Grove Cottage! Grove Cottage,” exclaimed the children in a breath, “ we are just there. What a charming place it must be! How soon shall we reach it, papa?”

“ We have some miles yet to go,” said their father.

“ Some miles!” repeated Emily—  
“ O, what a long long way, and I thought we were just at it! There, there is a mile stone—Egremont, four miles,” continued she, glancing at it as they rode past—“ Grove Cottage is ten miles from Egremont, so we have six to go. I wish we were there. Do you know the names of the young ladies—of the Miss F.’s, papa?”

“ I recollect the eldest daughter,” said Mr. Somerset; “ I suppose she is





now grown up, and undertakes the tuition of her younger sisters, of whom, if I am not mistaken, there are several, though in truth I cannot recollect their names:—there may be a Caroline, or an Emily, for aught I know; those of my own little darlings are alone imprinted on my memory.”

“ These miles seem longer than any during our whole journey, said Caroline. “ There is a *something* in the road yonder, just between those two old oaks—I dare say it is a mile-stone.”

But Caroline’s mile-stone proved to be a milk-maid returning with her pails of new milk, and tuning a lively song. The children, who had alighted from the chaise in order to walk up a steep hill, begged for a draught: with which she willingly supplied them, by means of a little tin cup attached to one of the pails.

“ How delightful, how refreshing it is!” said Emily, who had never before

tasted new milk ; and when their father had given the good-natured milk-maid a handsome present, they proceeded.

“ Now, there is actually a mile-stone !” exclaimed Caroline, running towards it. “ Yes, Egremont, eight miles. How is this, papa ? We are much nearer Grove Cottage than I expected. I suppose I mistook the number on the last mile-stone, and called No. 7 No. 4 :—so we have scarcely two miles to go.”

“ I believe you made an error in your calculations,” said Mr. Somerset, smiling, “ for we have indeed nearly reached our place of destination ; these shrubberies on each side of the road foretell our approach to Grove Cottage. Do you not see the chinnies at a distance, rising above the brow of the hill ?”

“ Yes, papa, distinctly, plainly—very plainly—ah, now the windows come in sight, for the sun just sinking throws a shade of light upon them—and now the portico—we shall soon be there !”

The evening was calm and serene as a summer evening could possibly be ; the feathered choristers warbled in the groves, and tuned their little voices to songs of grateful joy ; the hearts of Caroline and Emily beat high with expected pleasure as they drew nearer the end of their journey, and the delightful scenes around them were in perfect unison with their feelings. The waggon, tinkling slowly along, was heard in the distance ; the sound of the sheep-bell seemed to be collecting the wandering flock ; the melodious note of the nightingale, seated upon a lonely shrub in the valley, appeared to welcome the strangers ; the trees and hedges looked as beautiful as they had done on the morning of their departure from London ; and presently a verdant lawn, on which the laburnums threw their long clusters of yellow blossoms, announced that Grove Cottage was just at hand. A sudden turn in the road brought them

to the gates, which were thrown open, and they drove rapidly along the wide carriage-road towards the house. The lawn had just been mown, and a group of rosy children were playing under the trees among the new made hay ; but the moment the wheels of a carriage were heard, they relinquished their games and were seen running towards it. The house now appeared in sight. A green viranda, covered with fragrant flowers that wafted their fragrance in the open air, extended along the front ; the pillars were overgrown with the sweet-scented clematis, and intermixed with the brilliant scarlet blossoms of the Cyprus vine, among which the jasmine's stars of silvery white peeped in profusion, forming a contrast to the brown bell-shaped blossoms of the cobia scandens. The children were ready to fancy themselves in fairy land ! The chaise stopped—the hall bell rang—and the whole family were ready in a

moment to hail the arrival of their young visitors. Mr. and Mrs. F., followed by a train of blooming children, welcomed them to Grove Cottage, and led them into the drawing-room, the windows of which were down to the ground, and, being thrown open, the roses and other fragrant shrubs scattered their sweetness in every gentle breeze. Caroline and Emily were so much delighted with the scene that they almost forgot where they were. Miss F. soon came forwards, and introduced three of her sisters by their names, Laura, Ellen, and Anna; they appeared to be about the age of the Somersets, and as no reserve or restraint existed on either side, they were presently acquainted with each other, and soon became cordial friends. Tea was ordered: and during this social meal, the younger children, who had not yet dared to meet the eye of strangers, came peeping from behind the clematis-covered pillars,

in at the drawing-room window, first looking half afraid, and then venturing to smile, when Emily, who was nearest, returned a similar salute.

“Come, little Augusta,” said Miss F., “you have nothing to fear; come and shake hands with your new friend.”

Augusta, thus encouraged by her sister, held her hand to the sweet girl, who stooped down to kiss the fair and rosy cheek that was turned towards her; and, presently, another little creature, who had hitherto kept at a respectful distance on the lawn, observing her companion’s courage, came forward, *sans cérémonie*, whispering, “Kiss me too.”

It was not long before they made their appearance both together, and Caroline and Emily had now the much wished-for pleasure of becoming acquainted with the names of the whole group. Laura, Ellen, Anna, Augusta, and Lucy, were the pupils of their elder sister Emmeline, under whose kind tuition they were

making rapid progress in all that is good. They were taught to look up to her for advice and instruction, to place full confidence in her judgment, to esteem her opinion beyond that of every other person except their parents, and to love her with an affection seldom equalled.

It was too late in the evening for the children to survey the beauties of Grove Cottage ; they retired to rest at an early hour, arose the following morning with renewed spirits, and hastened down stairs as soon as they heard the cheerful sound of little voices in the hall.

Laura, Ellen, and Anna were waiting to walk with them before breakfast. Their affability and good-nature had already made Caroline and Emily consider them in the light of sisters, and arm in arm they sallied down the hall steps and through the viranda into the beautiful pleasure-ground.

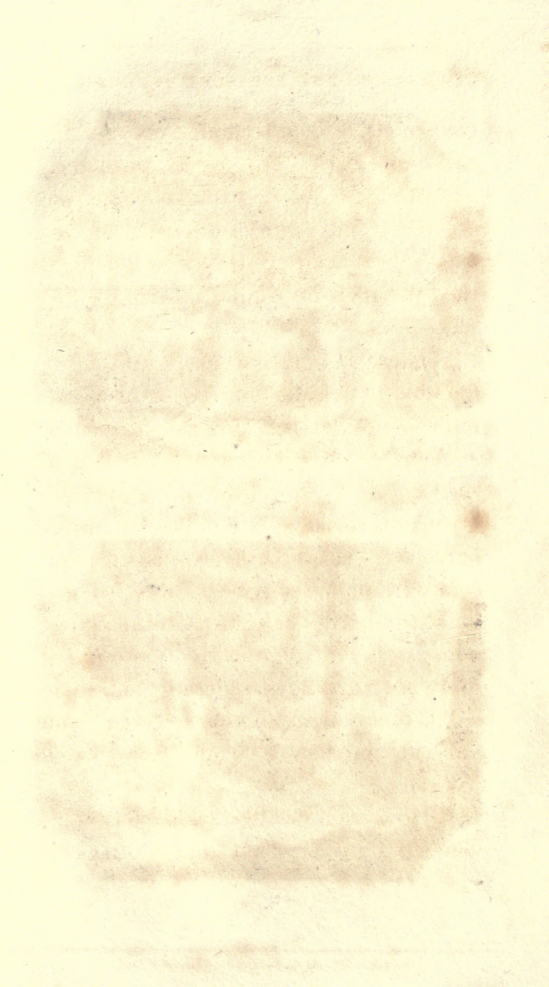
It was laid out with much taste, and in such a manner as to afford every

convenience for the amusement of the children. In a retired spot, shaded by high trees, a green painted swing was erected ; and further on, obscured from the sight by a thick holly hedge, were the little plots of ground allotted to their cultivation.

“ There are our gardens,” said Ellen, “ Look at this almond tree !—this bed is mine—and that is Laura’s—and yonder is Anna’s. See ! what fine sweet peas she has.”

“ And we have not only gardens for ourselves,” said the lively Anna, “ but some are prepared for you also. These two little borders are to be under your care while you live with us ; you see there are many flowers already, and there will be many more in blossom soon ; and look at the new fork and rake which papa has given us.”

“ How delightful it will be !” exclaimed Caroline. “ Grove Cottage is





a hundred times prettier than I anticipated. But where is your green-house?"

"Oh! that is in the garden—come this way." The smiling girls now followed their young companions through a door covered with rustic trellis-work into the garden, and entered a long range of hot-houses, in which rich and tempting clusters of grapes were hanging in profusion: thence they proceeded to the green-house, where Emily was gratified by seeing as many geraniums as she could wish; and leaving it by a door at the farther end, they re-entered the grounds, crossed a bridge over the fish pond, and turning through a winding walk, came to the lawn, upon which stood a very large cage of painted wire, divided into several compartments, each of which was occupied by birds of various sorts.

Caroline had just begun to admire the silver pheasants, and Emily was giving some crumbs of grated bread to the little

French partridges, which were tame enough to eat out of her hand, when the breakfast bell was heard; and, obedient to the summons, the young group hastened together towards the house.

“Oh, papa,” exclaimed the Somersets, running to their father the moment they entered the room, “this is a most charming place! We are very happy; and we have been looking at the swing, and at the garden, and the green-house, and the geraniums, which are a hundred times more beautiful than those in Russel Square: and the cage—what do you call it, Laura?—in which a great number of birds are kept, and some of them are so tame as to eat out of my hand—I wish you could stay with us, papa, and then we should be quite happy!—But what did you call that great cage, Ellen?”

“An aviary.”

“Yes, yes, an aviary—that means a

place in which birds are kept. I wish Edward could see the aviary, he is so fond of birds; and I wish mamma could see the green-house, for she is very fond of flowers."

"We must make your little girls botanists whilst they are with us, I believe, Sir," said Mrs. F. "Botany is a study in which my children take peculiar delight; and I believe you will wish Caroline and Emily's amusements and pursuits to be associated with those of my daughters."

Mr. Somerset bowed assent.

The children did not feel much more relish for breakfast than they had done on the morning of their departure from London; but when the things were removed, and Mr. Somerset's chaise was announced, it must be owned that the tears came into their eyes, and their joy seemed damped for a few moments; for never before had they been separated from both their parents. Their father appear-

ed to be under the influence of similar emotions : but as he bade them adieu, he felt a secret assurance that they were under the protection of the kindest of friends, and that they would, under the tuition of the gentle Emmeline, reap advantages of which they had hitherto been deprived ; for he was aware that their education had been neglected, and could not but rejoice in the thought that their advantages as to intellectual attainments would be many in this retired spot, far away from the crowded drawing-room and town amusements, and that a turn might be given to their dispositions which would prove of essential service in future life.

He kissed his little girls, who fondly embraced him, and commissioned him with many messages to their mamma, whom he was to meet at Matlock, then got into the chaise, waved his hand, and drove off. The children followed him to the gates, and watched the car-

riage as it descended the hill, till the shrubbery intervened, and it could be seen no longer.

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A MORNING RAMBLE.

Several days passed away, and Caroline and Emily found, on each succeeding one, fresh beauties to admire about Grove Cottage.

One fine morning, a week or two after their father had left them, Anna and Ellen called them at an earlier hour than usual, in order to walk out and gather some fresh flowers, with which they intended to make a garland.

They were opening the little green gate that led into the fields, when Anna suddenly stopped, exclaiming, "The grass is quite wet with dew! Look at the little pearly drops that cover every blade. You know we promised mamma that we would not get our feet damp,

and it is better to give up our pleasure than to break our promise."

"So it is," said her sister, "and I am quite willing to go without the roses and woodbines, for perhaps we shall be able to get them in the evening. But let us walk down the lane towards the village, and try to find some flowers that will be new to Emmeline."

Having made this resolution, the two sisters, accompanied by their young friends, turned down the narrow lane. They probably felt rather reluctant to leave the honeysuckles, which they had quite depended on gathering; but they relinquished them with cheerfulness, happy in the reflection that they were complying with the wish of one, who never desired them to do any thing but for their own good.

It was quite a summer's morning; the sky was blue and cloudless; the smoke curled slowly above the knotted elm trees in the village; the blythe sky-lark

carolled high in the air, and the little birds sang in the hedges.

“Hark!” said Caroline, “did you hear that sweet nightingale?”

“No, it was only a yellow-hammer; but the twittering of a yellow-hammer, when children are disposed to be gratified, is sweeter than the song of a nightingale when they are discontented, and not in a humour to enjoy themselves.”

Our little party did not now at all regret having left the fields, for they found they could gather as many flowers as they wished without treading upon the grass. For this was one of those unfrequented lanes, where—

—Purple tassels of the tangling vetch—  
Hang elegant.

And a little brook ran bubbling along by its side, in which

The bright *nymphaea* loved to lave,  
Or spread her golden orbs upon the dimpling wave.

And further on the bank was covered with foxgloves—

———In whose drooping bells the bee  
Made her sweet music.

Emily gathered as many flowers as she could hold in her hand in a very short time ; first stopping to cull one because it was so sweet ; and then another, because it was so beautiful. While thus busily engaged, Emmeline overtook them ; she gave her little basket to Ellen, and they walked on together.

“ Look at my flowers, dear Emmeline,” said Caroline, “ are they not pretty ? We shall take them home, and make a crown of roses for Anna to wear on her birthday, as well as a garland to hang up in the arbour ; and we shall ask Mrs. F. to go and look at it.”

“ But your pleasure will soon be over,” said Emmeline, smiling, “ for the flowers will fade in the course of a day or two. You walk out and gather as many as you

can possibly carry, and then take them home and scatter them about, without paying any more regard to their beauty. It was but yesterday, when you returned from your walk, that I happened to enter the school-room, and found the desks, chairs, and tables strewn with withered roses and faded woodbines. I then went to the nursery, and found it in the same state; and when I asked Ann why there was such a litter, she replied,

“ Miss Somerset left them here, and desired they might not be thrown away; and Miss Emily put them there, and said they were for a garland.”

“ Now, although I like to see you fond of flowers, and am willing for you to gather as many as you please, I cannot help wishing that they might answer some further purpose than merely to be taken home to give the servants trouble.”

“ Ah!” exclaimed Caroline, “ I know what you mean. You think we ought

to understand botany as you do. But botany appears to me to be such a very dry, unentertaining study, full of such hard names and difficult words, that, much as I love plants and flowers, I do not think I should ever like it; besides, I do not know of what use all those long words are, such as *Monandria* and *Diandria*, which I have sometimes seen in your *Withering*, when it has been lying on the study table, and a great many more, equally difficult either to remember or know the meaning of.—I do not like your *Withering* at all, Emmeline!”

“Stop, stop my dear, you must not dislike poor *Withering* without reason, for he is a great favourite of mine, and his botanical arrangement of British plants is too valuable to be despised. Botany is not quite so difficult as you seem to imagine, and by understanding it, we become acquainted with the uses of various plants, and the peculiar purposes for which they are designed. All plants are of service

in one way or other: some are used as medicine, others as food; and as their nature and properties are very different, it is quite right to become acquainted with those properties, otherwise we might misapply them, and render those injurious in their effects, which might have been beneficial. There are some long names, certainly but those who are afraid to contend with little difficulties, will never be fit for undertakings of more importance; besides, practice and experience, which render the most difficult things easy, would soon enable you to understand and retain them."

"But," said Caroline, blushing, "you draw from nature—you copy all the flowers you find; we cannot draw except from patterns."

"But Laura and Anna draw from nature, and you shall learn to draw from nature also, if you please."

"That will be delightful indeed!" exclaimed both the children at once.

“ Botany will be very amusing, if you will teach us how to copy every fresh flower we find. And may we have a book like *Laura and Anna* ?”

“ Yes, you shall each have a book, and write the botanical description under every plant,” said Emmeline, “ which will be of use in enabling you to remember their names ; and I believe you will, in a short time, acknowledge, that Botany adds double interest to all your walks and rambles.”

They were at this moment sauntering by a cottage garden, in which a labourer was at work digging potatoes ; Emmeline spoke to him as they passed, and begged him to give her one of the beautiful tulips which were growing in the next little border. He laid down his spade instantly, and gathered the finest among them. “ You are heartily welcome, madam,” said he, when Emmeline thanked him, with that cordial courtesy with which she always addressed her inferiors.

“ Now, Caroline, my love,” said she, “ I believe I can give you a little botanical lesson without troubling your memory with any hard names, and without even the assistance of Withering. I chose this tulip in preference to a wild flower, because I imagined it would be less difficult to begin with. Can you describe it ?”

“ Oh yes, very easily,” said Caroline. “ Every body must know that it consists of a root, and some leaves, and a stalk, at the top of which grows a beautiful tulip.”

“ Very well,” said Emmeline, “ so far, so good. Each part of the plant is of material consequence to the rest. Let us begin with the root :—of what use is the root ?”

“ It supports and fixes the plant in the ground,” replied Caroline, “ for without it the stalk would be unable to stand upright, and to bear the weight of the blossom.”

“ That is one use, certainly ; but even supposing the plant could stand upright without its root, it would be unable to live without it, because it is the part from which it receives its chief nourishment. I dare say you have sometimes observed that the roots of different plants are of different forms.”

“ Yes,” said Emily : “ potatoes, for instance, are very different from hyacinths. We had hyacinths at home in the Spring, and I perfectly remember noticing the roots when they stood in glasses in the parlour window ; they were of a round form, and had long thin stalks, that struck down into the water.”

“ You must not call them stalks, my dear, but fibres,” said Emmeline ; “ they were of unspeakable service to the hyacinths, for, like so many mouths, they absorbed the water, and conveyd it to the plant : thus it is with the root of the tulip, its numerous fibres imbibe moisture from the earth, and yield it support and

nourishment. This is one great use of the root ; now for the stalk or stem. The stalk is furnished with innumerable vessels, which convey the fluids to and from every part of the plant : so it not only answers the purpose of supporting the blossom, but likewise that of furnishing it with nourishment."

" And the leaves, dear Emmeline, are they of any further use than ornament ?"

" Yes : they answer the purpose of lungs, by imbibing and giving out moisture."

And now we will talk of the flower, which requires a more particular explanation. Beautiful as it is to the eye of a superficial observer, it is yet more so to one who examines it attentively, and becomes acquainted with its curious structure. These outer leaves, which are so brilliantly striped with brown and yellow, are called the corolla ; the coloured part of a flower is always called the corolla. You see this is divided into six

parts ; each distinct part is called a petal. Now look into the blossom, and tell me what is there."

" Ha ! ha ! I never looked into a tulip before. I see six little columns, each crowned with a black tuft, and a taller column rising in the middle."

" The six little columns, as you call them, are named *stamens*; and the little black tufts are the *anthers*, containing the pollen or farina, with which bees make their wax. The middle column is called the *pointal*, and the small particles of black dust which burst from the anthers are absorbed by it, and, passing through the style, reach the germ, which is the lowest part of the pointal, where they become vivified, and produce seed for future plants. I dare say this is quite new to you. You never thought before of the *manner* in which plants are produced. I trust, however, you will soon find that your pleasure in viewing the beauties of creation is materially in-

creased in proportion as you understand the source from whence effects so wonderful and so curious proceed. When the seeds are ripe we gather them, and set them in the ground the ensuing spring, when they soon peep above the garden mould, and produce other flowers.”

“ Indeed !” said Emily ; “ I had never before any idea that the black dust we see on the stamens of the tulip or the scarlet farina, or those of the lily, could be of such important use. Botany will be extremely amusing, if it is all like this, and especially if we can copy our plants : will it not ?”

“ Yes, I hope you will find it so, my dear,” replied Miss F., “ and I have no doubt but you will shortly discover that even a daisy or a primrose possesses beauties unseen by the common eye, and that the more we study the works of God, the more wisdom, loveliness, and harmony, we shall discover in all of them,

and that while we admire, it is impossible not to adore. This is one reason why I would wish every young person to study botany."

The conversation was here interrupted by a turn in the road, which brought them to a little wicket gate that led to a white-washed cottage, whose chimney was covered with a mantle of venerable ivy. Emmeline entered the house in order to dispose of the contents of her basket, while the children ran further down in the lane, to seek for suitable plants to copy when they got home, for with all the ardour incident to childhood, they now fancied that botany would be the most delightful amusement; and, before they reached Grove Cottage, Caroline and Emily had actually learned that those flowers whose corolla is in the form of a cross are called cruciform, as the cabbage and radish; that those plants whose blossoms are supported by little stalks springing from one large or central

one, like the spokes of an umbrella, are called umbelliferous, as parsley and carrot; and that those flowers which contain many little florets in one common calyx or cup, as the daisy, are called compound flowered plants, &c. &c. They had also selected a specimen of money-wort, with its trailing yellow blossoms, and an ivy-leaved campanula; and after breakfast they seated themselves in the cheerful library, with their pallets and paint-boxes before them, and began to make the first attempt to copy from nature.

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#### ANNA'S BIRTH-DAY.

At length the important day approached to which we referred in the preceding chapter. The tenth birth-day of the little Anna was just at hand; and although Caroline and Emily were busily employed with the money-wort and the ivy-leaved campanula, they found time to assist the

other children in forming a crown of roses, to dignify their sister on this eventful day. But as the petals of the wild roses fell off soon after they were put in water, and the other flowers were destroyed by having been pulled to pieces in order to be examined, they were allowed to gather as many roses as they pleased out of the garden ; the crown was, therefore, of the sweetest flowers ; and, as Emily, who was very fond of Anna, playfully said, “ it well befitted the sweetest of girls,” for it consisted of fine damask roses and sweet scented clematis, woven together with much taste and elegance. But the pleasure of wearing this garland was reserved till towards evening, and when it was pronounced to be exactly of the right size, and to fit Anna as exactly as the crown of cowslips and marigolds had fitted the village girl who was chosen Queen of May. Emmeline was called upon to fix it up, by means of a pulley, in a shady arbour,

where a cage containing a pair of doves was usually stationed — this had been removed upon the occasion, and just as the flowers were adjusted, and the garland was being drawn up, Anna, who had escaped from the rest, came running down the broad nut-tree walk with Galignani's Grammar in her hand: "*Noi sarémo—voi saréte—églino saránno*" — exclaimed she—" Oh, this difficult verb! I do not like future tenses at all, dear Emmeline, and I am sadly afraid that I shall not have said this before the strawberry girls come."

" But it will be quite time enough to learn your lessons for to-morrow in the evening," said Caroline, who had not heard the latter part of the sentence.

" But this is my Italian day," rejoined Anna. " It is my turn to learn Italian, and this difficult verb takes such a long time! I wish I could remember the *noi sarémo*, and *voi saréte*, and *églino*

*sarà* ; and then I should do. However, I will go and sit down upon the grass at the other end of the walk, and think no more about the garland."

"Lessons upon your birthday! do you really, actually learn lessons to-day?" exclaimed both the Somersets, in a tone of unaffected surprise.

"Oh yes, certainly; we never think of missing them," rejoined Anna, running away.

But Caroline and Emily were not so easily satisfied.

"How very curious!" said they. "Indeed, Miss F., though we have not been used to do much at home at any time, yet upon our birthdays we were always allowed to enjoy ourselves as much as we pleased. Mamma always allowed us to do just what we liked; and many young ladies of our acquaintance, in town, never learn any lessons upon their birthdays. There are the Miss B.'s and the

Miss M.'s, and Augusta C. and her sister: O! how they would laugh at the idea of saying lessons upon their birthdays."

"Now, Caroline," said Emmeline, smiling, "give me some good reason, tell me only *why* people should be *idle* at those particular periods?"

Caroline was somewhat confused at receiving a question she knew not how to answer.

"O! I cannot tell *why*, but one always fancies that day to be a day of enjoyment; and of course it cannot be so if one has long troublesome lessons to get by heart."

"I hope you will remember to ask Anna, in the evening, if her birthday has not been spent more happily, even with her Italian lesson that she just now called difficult, than if it had been spent in idleness. A whole holiday generally produces fatigue, languor and *ennui*, before the day is over; and this little exercise in the morning will give your

young friends an additional relish for the amusements we propose in the afternoon."

Caroline still felt as though she should not be inclined to conjugate an Italian verb upon her birthday.

"I know some little girls," said Emmeline, "who seem to imagine, that upon their birthdays they may be idle or ill-humoured, or inattentive or troublesome, or behave just as they please; but as we wish for none of these dispositions to be witnessed at Grove Cottage, we attend to our lessons as usual; perhaps, if possible, with more than customary ardour; the thought that a year has rapidly flown since the last anniversary of our birth, ought to give additional animation to our pursuits, and fill us with a stronger desire of advancing in all that is good."

Emmeline now left the arbour; her sisters accompanied her: but Caroline and Emily sauntered towards the greenhouse to look at some little verbenums

they were rearing; and it was after twelve o'clock when they reached the house, and entered the room appropriated to the use of the children. There they were—Laura at the piano; Ellen, with the globe standing before her, busy in passing the quadrant of altitude over Quebec, in order to find its distance from London; Anna, with her slate and Italian grammar, employed in translating the exercises that accompany the verb *essére*; and little Augusta and Lucy, each with a spelling-book in their hands. The two sisters seated themselves upon the sofa to contemplate the happy countenances of their young companions (for although they were accustomed to say lessons with the F.'s, they were, by particular desire, this day exempted from the task)—no ill-humour, no discontent prevailed; each little girl was intent upon what she was about, and appeared to have forgotten the birthday. At length the clock struck one; the long

tiresome lesson was accomplished ; the problem worked, and the piano closed. Full of youthful glee, the children left the school-room to enjoy their amusements with a greater relish than if they had been sauntering about, and idling away their time during the whole morning.

“ Now, come to mamma's dressing-room,” said Anna, catching Caroline by her arm, “ and you shall see what pleasures are in store for us.”

The other children followed them; and when they reached the dressing-room, a pleasing sight indeed presented itself.

“ We have been making these baby clothes ourselves,” said Anna ; “ Emmeline has assisted us, of course. Look, there are ten different lots ; and in the afternoon we are going to take them to those poor people in the village, for whom they are intended. Is not this a pretty little bed-gown of blue striped gingham ? This, and those two little caps and shirts, are for Sally Moss's baby :

and that nice comfortable petticoat and little frock are for the poor woman who lives in that small white-washed cottage, where Emmeline went the other morning when we were with her. You cannot think how we enjoy this day. All the poor people know about it, and enjoy it almost as much as we do. You must go with us, and I am sure you will smile when you see the little bunches of flowers they give us; they generally get the best that are to be found in their gardens: a great cabbage rose and a few pinks, and a sprig of southernwood; we have much better at home, certainly; but then we like them, because Emmeline says they evince their gratitude."

Dinner was ordered at an earlier hour than usual, that the young people might have time to accomplish all they wished in the afternoon; and almost before the desert was removed, they had left the room, and were preparing their little loads for the purposes for which they

were designed. They themselves were soon equipped in their hats and spencers, and with happy countenances, expressive of benevolent pleasure, they rambled arm in arm, down the pretty rural lane we have already described, towards the village. The white-washed cottage first presented itself; and here the novelty of the scene delighted Caroline and her sister. Before they came into the north they had never been within a cottage; and the neatness of this—the stone floor—the furniture rubbed bright as a looking glass—the long row of pewter plates—the clean casement windows, through the bars of which the full blown roses peeped, and wafted their balmy fragrance, pleased them exceedingly; and when the children had disposed of the little offerings intended for nurse Greville, they proceeded to the pretty cottage where Sally Moss lived. It was near a farm-yard, and built in a rural style; the thatch was half-covered with a mantle of

ivy—and a fine chesnut, with its white pyramids of blossoms, overshadowed it; they walked up the little gravel path to the door, lifted the wooden latch, and entered it *sans cérémonie*. A lovely infant was sleeping in the cradle; and a boy of two years old lay half slumbering on its mother's knee.

“We have brought a bedgown for your little girl, Sally,” said Anna, taking the bundle from the basket that Laura and herself carried between them.

As Sally rose, she saw Caroline and Emily, who immediately recognized her as the good-natured woman who had given them the draught of new milk on the evening of their arrival at Grove Cottage. They spoke to her with pleasure; admired her chubby-cheeked boy, and tied a new cap upon the head of the little baby; and after having partaken of some new whey, and admired the neat little garden, the cows in the farm-yard, and the fine young bantams that were

pecking up the barley strewed for them in the little court, they left the cottage, attended by the blessings and good wishes of the grateful woman. How trivial an act of kindness will impart greater delight to a poor person than any gift that wealth could purchase! Even a kind look will sometimes excite their gratitude, and cause smiles of joy, amidst the clouds of affliction. The F.'s knew this, and their benevolent hearts expanded at the very thought of making others happy. Caroline and her sister enjoyed similar sensations; felt the pleasure that arises from doing good, and made many resolutions, that when settled at Aston Hall, their birthdays should be spent exactly in the same manner.

It would take us too long to give an account of the cottages that our youthful party visited on this afternoon, or to describe the grateful joy that prevailed among the receivers of their bounty. Suffice it to say, that having disposed of

their little burdens, they returned home, and repaired to the shady arbour at the bottom of the nut-tree walk. The crown of roses was lowered and placed on Anna's head, and presently the sound of voices, rising in chorus and in songs of joy, was heard ; a moment after a train of charity girls were seen robed in their Sunday frocks, of blue checked gingham, and bearing little baskets on their arms. These contained wild strawberries, which they had been gathering in the wood, and now brought as an offering to Anna. They were accepted with many thanks, and the children were then conducted to a long table that was set out upon the lawn, where they partook of a nice supper that had been prepared for them, while the little F.'s and their companions sat near them, under the shade of two oaks that formed a green canopy overhead, and ate their strawberries and cream. When supper was ended, Anna presented each of the charity girls with a little

book, which had been selected by Emmeline for the occasion : to one she gave the Dairyman's Daughter ; to another the Young Cottager, &c. All were gratified, all were pleased ; and each returned to her humble home, delighted with the evening she had spent on the lawn at Grove Cottage.

Evening indeed was come ; bed-time was now just at hand ; but Emmeline did not forget to ask her sister Anna, when the Somersets were by, if she had not spent a happy birthday, notwithstanding the long Italian verb that had been conjugated in the morning ?

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#### THE ARTIFICIAL SPAR.

“ I HAVE just been into the Conservatory, Emmeline, and the gardener tells me that the name of the curious flower I was looking at before breakfast is the air-plant,” exclaimed Caroline, running

to the open window of the parlour. “ I quite forgot its botanical name—the—the—however, never mind that, it is called the air-plant, because it lives on air ; that is, it requires no nourishment from earth or water ; indeed, I believe it has no root, no fibres to absorb the water if it did want it ; so now I know for what reason it was tied up to that little hook by a bit of yellow silk. What a variety of plants there are in your conservatory ! I have been looking particularly at the cinnamon with its fragrant leaves ; and the nutmeg, and the sassafras, and the coffee tree, with its white blossoms and scarlet berries : and the tea tree, which the gardener says is a native of China, the country from whence tea is brought : it has pretty blossoms like wild roses—and little leaves, which Francis tells me the Chinese gather very carefully, and then roll them up over hot plates, and fan them with large fans to dry them, and then they are packed in great chests

and sent over to England ; and the very next time you make tea, I mean to look in the tea-pot, in order to see whether they expand and unrol themselves as he says they do. But now will you tell me the right name of the little air-plant ?”

“ It is the *Tillandsia xiphioides*,” replied Emmeline, “ a native of Buenos Ayres.”

“ Wait a moment—oh, I recollect, Buenos Ayres is the capital of Chili, in South America. I have heard papa say, that Brazil produces many beautiful flowers, and I suppose Chili does also. Well, what else ?”

“ It possesses the English name of *air-plant*, because it has, as Francis told you, the singular property of vegetating for years when suspended by a single thread. We have, for instance, had our *Tillandsia* more than three years in the conservatory ; it was brought over by Captain G. when he returned from America.”

“ The *Tillandsia*—the *Tillandsia xiphioides*,” said Caroline : “ I will try to remember that hard name for the sake of the curious plant ;” and she was again repeating the word *Tillandsia*, when her attention was attracted from both the air-plant and the conservatory, by seeing Laura employed in twisting some wire into the shape of a basket.

“ Laura ! my dear Laura ! what are you making ?” exclaimed she, running up the steps, round through the hall into the breakfast room. “ A little basket !”

“ Pray what are you making a wire basket for ; you know very well that it cannot hold any thing, for whatever you put in would fall through these openings ; besides, I do not see any thing particularly pretty in a wire basket.”

Laura smiled ; and as Caroline spoke, some of the other children entered the room, and evinced by their blooming countenances that they had been for a walk.

“ Oh, Caroline, you are here,” said Ellen : “ we looked for you in every place we could think of before we went out, but we could not find you. I wish you had gone with us, for we have had such a pleasant walk down to the village ! We have been having some syllabub under the cow at Farmer Rand’s ; and he was so polite as to send his man Ralph to the blacksmith’s, to procure these clinkers for us. Look, Laura !”

While the children had been walking, Caroline had been examining the plants in the conservatory ; she was therefore at a loss to imagine what Ellen meant to do with the black, dirty-looking things in her basket, and she turned to Emmeline for an explanation.

“ We are going to make an experiment,” said she. “ The children have sometimes seen what is called *artificial spar*, and they are anxious to produce some specimens. Laura is going to make a spar basket ; and these *clinkers*, as the

blacksmiths call them, are for pieces of spar; they are only coals which have been burnt until they are become cinders, perfectly calcined and hard.

“How curious!” exclaimed Caroline, in surprise. “But how do you make it? what do you make it of? pray tell me, that I may tell my mamma when I go home.”

“You shall know in time, my little friend,” said Emmeline, and ringing the bell, she desired the servant to take a large saucepan and some alum that was lying in a paper in the china closet, into the laundry, and also to wash the clinkers that were in Ellen’s basket.

“Now,” said she, turning to the children, “if you like to follow me, you shall see how we give these black, dirty-looking coals the appearance of beautiful transparent spar.” Laura’s basket was just completed, and the young party needed not a second summons, but followed Miss F. into the laundry, expecting to see some

wonderful exploit. She boiled the alum in the saucepan, and when it was perfectly dissolved, poured part of it carefully into a large basin in which the clinkers were laid, and the rest into a jar in which the little wire basket was suspended.

“Now,” said she, “you may go and amuse yourselves, my dears. Caroline, your ivy-leaved campanula is not completed, I believe, and we have a new book to read this evening. I have only to request that you will none of you come into the laundry till twelve o’clock to-morrow morning, and then you shall see them again.”

“Is this all?—is this all that is to be done?” exclaimed several of the children, in a tone of disappointment. “May we not come with you when you come to make the spar?”

“You shall accompany me if you please, next time I enter the laundry, but I do not intend to come again to-day.”

The children, assured that Emmeline would keep her word, returned to the parlour and began drawing.

“ I will copy the curious air-plant,” said Caroline : “ but stay, I forgot you have only one, I must not have that. Well, I will copy the sketch of the rustic bridge that is in your portfolio, if you will lend it me.”

“ And I,” said Emily, “ will be reader—what book shall we have ?”

“ I have an entertaining volume for you,” replied Emmeline. “ Here it is. ‘ Travels in Africa, by Mungo Park, an enterprizing traveller, who penetrated into the interior of that country, in hopes of discovering the source of the Niger, but met with a melancholy death by the natives.’”

The children seated themselves to their several employments, and read aloud by turns, while Miss F. gave explanations of any thing they did not understand respecting the country, &c.

The next day soon came, and at the appointed hour the young party, full of eager expectation, hastened to the laundry. Emmeline put her hand into the bason, and drew out one of the pieces of coal incrustated in large and beautiful crystals, and wearing every appearance of a piece of Derbyshire spar.

“How extremely beautiful!” exclaimed Caroline, “I had no idea that you could make any thing like this.”—“How very beautiful!” said all the children, as Emmeline drew out each succeeding specimen. “Now for the basket!” Emmeline cut the twine by which Laura’s little wire basket was suspended, and presently drew out of the water a beautiful white basket formed of crystals as transparent as crystal itself, and glittering like diamonds.

“I am glad that I did not go to Farmer Rand’s,” exclaimed Laura. “I am glad that I stayed at home and deprived myself of that little pleasure, in order to

have the much greater pleasure of possessing this basket. But how came these beautiful crystals? how was the spar, as you call it, produced? and how could the alum be formed into these regular shapes when no one even touched it?"

Emmeline had made this little experiment on purpose to excite the curiosity of her sisters and their companions; and, after some ingenious inquiries on their part, she told them that the process the alum had undergone was called *crystallization*.

But none of them understood what was meant by this term, and they were again obliged to have recourse to their kind instructress.

"Ice," said she, "will give you a good idea of an entire crystallization, for it is nothing more than water congealed and formed into long needle-like masses by the action of cold. Most solid bodies, but chiefly saline minerals, are capable of being made to assume the form of crys-

tals. All bodies consist of very minute particles, and as these particles must be at liberty to move before they can crystallize, it is obvious that we cannot reduce any bodies to the state of crystals except those which we are able to make fluid."

"I begin to understand you," said Laura. "We could not make coal or diamonds crystallize, because we could not first dissolve them in water, though we may alum, or salt, or saltpetre, or similar substances, But how is it that the little particles of which alum is composed *get together* again, after having been once separated and mixed with the water?"

"The principal part of the water is drawn off by evaporation," replied her sister: "but I must explain that term. Heat, whether occasioned by the sun or fire, causes the particles of water to fly off or disperse into the air, and this is called evaporation. As the water in this bason evaporated, the particles of the alum I had dissolved gradually ap-

proached each other, combined together, and formed small crystals, which became continually larger by the addition of other particles, and by the time the remaining water was quite cold, the crystals of alum had formed, and attached themselves to the clinkers and the little wire basket. You have received a little lesson in chemistry by means of this experiment, which is so pretty a one, that I am glad we tried it."

"It is indeed," said Caroline; "and how one subject springs out of another! Your spar basket, Laura, has given me quite a new train of thought. I really think I should like to learn chemistry, when I am rather older, if it be all like this."

"But, Emmeline, you told us that most *saline* minerals were capable of crystallization: what do you mean by *saline*?"

"Of a salt or pungent taste, as alum, saltpetre, nitre, and salt itself: all of which will form into crystals of different

shapes, after having been dissolved in water."

"What are those minerals called that are not saline?" said Emily. "I have learnt already that minerals are substances dug out of the ground: substances that neither grow nor feel are minerals."

"All bodies belonging to the mineral kingdom are divided into four classes," replied Miss F., "in the same manner as all plants belonging to the vegetable kingdom are divided into twenty four. Mineralogists thus class the productions of their favourites :

"Earthy minerals, such as are without taste or smell, as diamonds, spar, clay, sapphires and rubies.

"Saline minerals, such as are heavy, soft, and frequently semi-transparent, as alum, salt, &c.

"Inflammable minerals, such as are light and brittle, and never feel cold when we touch them, as coal and sulphur.

"Metallic minerals, such as are cold

and heavy, capable of being heated and wrought into different forms, or, in more scientific terms, malleable, that is, capable of extension under the stroke of a hammer; and ductile, that is, possessing the power of being drawn out into wire, as gold, silver, copper, iron, tin, &c.

“ All different minerals are useful in different ways, and the study of them is called mineralogy.

“ Thus may our curiosity be gratified by surveying the productions of nature; and the more knowledge we acquire, the farther we extend our researches, the more reason we shall find to admire the general harmony and beauty that exists throughout the whole creation.

“ When you are a little older, I really believe, my dear Caroline, that you *will* find much pleasure in turning your attention to mineralogy and chemistry.”

As Emmeline spoke, the bell for dressing time was heard, and the children were dispersed in a moment.

## THE DRAWER OF SHELLS.

“ WHEN we were reading Park’s Travels, last night,” said Emily, “ I observed, he mentioned that the inhabitants of Africa employ shells, called *cowries*, in the place of money.”

“ They do,” said Miss F.; “ about two thousand of them are reckoned equal in value to one rupee.”

“ What is the value of a rupee?” asked Anna.

“ A rupee is an Indian coin, about equal in value to 2s. 3d.,” replied her sister. “ I have heard that the negro women fish for the cowries usually three days before and after the full moon, and thirty or forty vessels are laden with them every year in the Maldivé Islands for exportation to Africa, Bengal, Siam, and the adjacent islands, for the purpose of commerce.”

“ I should like to see a cowry,” said Emily; “ it appears to me a very strange

custom, for shells to be used instead of money."

"If you will follow me, my dear," said Miss F., "I can gratify you, I believe, by a compliance with your wish."

As she spoke she rose, and went towards the library, whither the children followed her. "Here," said she, opening a drawer belonging to one of the book-cases, "here is a cowry."

Caroline took it in her hand and admired its high polish; while Laura, who had already gained a considerable store of information from her sister, remarked that in uncivilized countries several species of these shells are used as ornaments for the person, being formed into necklaces, broaches, &c. And that a curious fact was stated by M. Brugière, that when the animals that live in them find their shells too small for the increased dimension of their body, they leave them, and proceed to the formation of new ones of a larger size, and better suited to their wants."

“The *cypræa moneta*, or money-cowry, forms the current coin of many nations of India and Africa,” said Emmeline, “and this covering of an inconsiderable worm stands at this day as the medium of barter for the liberty of a man—a certain weight of them being given in exchange for a slave.\* I am glad to hear that great exertions are being made for the destruction of this horrid traffic; and may all who are engaged in the benevolent design, have their highest wishes gratified by a complete abolition of the slave-trade throughout the world!”

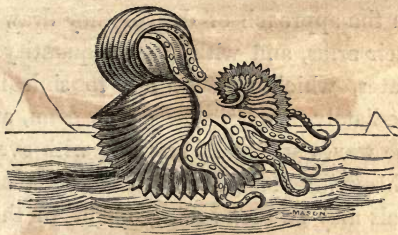
Caroline, in the mean time, had been examining a large white, transparent looking shell, somewhat in the shape of a snail-shell, and laid upon half a sheet of writing paper, which it almost covered. It was of a delicate texture, and composed of two separate sides, united by a narrow strip or keel of the same texture, and when she held it up to the light, she

\* Turton's Conchological Dictionary of the British Islands.





perceived that it was divided into a number of partitions or separate cells, perhaps thirty or forty, which formed a spiral line ; and there was a little hole in each cell through which a crow-quill might be passed.



“The ancients are said to have derived the art of navigation from the animals inhabiting these shells,” said Emmeline, turning towards her; “indeed the name *nautilus* is derived from a Greek word, which means both a fish and a sailor. These little animals are seen, in calm weather, floating on the surface of the water frequently in the Mediterranean,

with some of their tentacula extended at the sides, while two arms are thrown on high, supporting a thin membrane between them, which answers the purpose of a sail. These little creatures raise themselves to the surface of the sea, by ejecting the water from their shells, and on the approach of danger they draw in their arms, and with them a quantity of water, which causes them to sink immediately. When the sea is calm, and the waves are gently swelling with every whispering breeze, numbers of these animals may be seen sailing about in their elegant boats, and enjoying the clear sunshine. But as they possess the power of sinking whenever they please, they are seldom taken perfect, as they disappear the moment they are disturbed, and are only accidentally brought up in the nets of fishermen, or found left on dry rocks, and frequently very much injured, as their shells are of such a brittle texture."

" May I repeat the lines I learned the

other day," said Ellen: "I think Caroline will like them, and understand them too, which makes them much prettier."

"You may, my love."

"Two feet they upward raise, and steady keep;  
These are the masts and rigging of the ship.  
A membrane stretch'd between supplies the sail,  
Bends from the masts, and swells before the gale.  
The other feet hang paddling on each side,  
And serve for oars to row, and helm to guide.  
'Tis thus they sail, pleas'd with the wanton game,  
The fish, the sailor, and the ship the same.  
But, when the swimmers dread some danger near,  
The sportive pleasure yields to stronger fear;  
No more they wanton drive before the blasts,  
But strike the sails, and bring down all the masts.  
The rolling waves their sinking shells o'erflow,  
And dash them down again to sands below."

"They are very pretty lines," said Caroline, "and I have now as good an idea of the clever nautilus as if I had actually seen him in his little light boat rowing away! I am quite delighted with this drawer of shells," continued she, turning to Miss F. "Do you know I never saw any shells before, but a few that papa brought from Brighton last

summer, which are placed on the dining-room mantle-shelf at our house in London ; and those in the British Museum, which I once saw, when I went there with mamma, and some ladies of her acquaintance ; but then I could not touch them, and examine them as I wished, because they were all locked up in glass-cases. Pray what is the study of shells called?—You know, I fancied I should not like botany at first, because there were such hard names ; and now I am so fond of it ! I will not form any foolish prejudices this time, and imagine I shall not like the study of shells if there are any difficult words to remember.”

Emmeline smiled, and exclaimed,

“ Each moss,

Each *shell*, each crawling insect, holds a rank,  
Important in the plan of Him who framed  
This scale of beings.”

“ Ah ! I know what you mean,” rejoined Caroline, catching the allusion,  
“ you think it right to be fond of flowers,

or shells, or any thing else that can lead us to admire the hand that formed them. Do you know I have not only learned many things since I came to Grove Cottage: but even my very thoughts are different from what they once were. I never used to think *who* gave the grass its beauty, *who* caused the flowers to blossom, or *who* gave life to the little insects that were fluttering amongst them; but you have taught me to consider, that they are all formed by the finger of God, and that even common flies and pebbles are to be admired, as they exhibit His wisdom and goodness."

Emmeline was gratified by the remarks of her young friend, and delighted to perceive that, with all the gaiety and artlessness of childhood, her disposition was becoming habitually thoughtful, and inclined to reflection: for she had earnestly endeavoured to engraft the seeds of piety in her bosom, and she now directed the discourse to the objects before them.

“Shells form a link in the chain of nature,” said she, “and may well be admired for their singular and beautiful forms, their brilliant colours, and their delicacy of texture. The study of shells is called *Conchology*, and it is a study particularly adapted to lead us to the contemplation of the glory of God in the creation. Shells are divided into three classes: Univalves, Bivalves, and Multivalves.”

“Only three classes, how very easy! How are they distinguished?”

“The univalves consist of one piece only; the bivalves of two pieces or valves connected by a hinge, and the multivalves of more than two.”

“Then the *nautilus* belongs to the first class,” said Caroline, “as it consists of one piece only. Oh, here is a cowry; it is a univalve also, as it is but one piece: and here is another shell that consists but of one piece—the *patella* or limpet—I suppose that is its name.”

“Limpets are found in great plenty on cliffy coasts, adhering to rocks and stones, to which they have the art of attaching themselves so very closely, that some strength is required to detach them with a knife.”

“Here is the *teredo* or ship-worm,” said Emily. “Why is it called the ship-worm?—it is a curious little thing—see, what a hole it has made in this piece of wood!”

“It obtains its name,” said Miss F., “from the property of perforating itself into wood; such numbers are sometimes found in the sides and bottoms of ships, as even to endanger their sinking. By means of their hard and cutting jaws, they are able to penetrate into almost any timber; and stakes, which had not been in the water for more than four or five years, though of solid oak, have been found, on examination, to be perforated by them. I have heard that, some years since, the inhabitants of the United

Provinces were under great alarm on account of these worms, which had made dreadful depredations in the piles that support the banks of many parts of those coasts. One of the persons who had the care of the coasts at that time, observed with surprise that some of the timbers were, in the course only of a few months, made so full of holes, that they could be beaten to pieces with the least force."

"Troublesome little things! But can nothing be done to remedy such disasters?" said Caroline.

"The best method which has hitherto been discovered to preserve timber from the ravages of these worms, is that which is now adopted in the dock at Plymouth, to cover all the parts which are under water with short, broad-headed nails. These soon cover the whole surface with a strong coating of rust, which is found to be altogether impenetrable to the animals."

"I am glad they have discovered a

method of getting rid of their disagreeable visitants at last," said Emily.

"Now I will look for a bivalve: and next time I write to mamma, I will tell her that I am as fond of conchology as of botany. Here is a bivalve—it is a cockle, and consists of two parts, united by a hinge."

"Cockles are very common upon sandy shores," said Emmeline. "They are frequently found in little inlets or bays near the mouths of rivers, and in such situations are generally buried at the depth of two or three inches in the sand, the place of each being marked by a small round spot."

"Then how do the people manage to get them from under the water?" asked Ellen. "Those little spots are very curious, and seem as though intended for tomb-stones, to point out where they are buried."

"Women and children dig up this little shell-fish with a small spade," said her

sister. "I think you will like to hear something about the little inhabitant of this shell," taking one in her hand; "it is the *solon* or razor-shell."

"But where is the little inhabitant?—I do not see it."

"Oh, it is gone long ago; on taking a shell, the fish is immediately removed, otherwise we should be unable to keep them in the cabinet."

"How do shell-fish move?" said Caroline. "You know they have no feet, and also that they cannot swim as other fish do. Have they the power of moving from one place to another?"

"Some have what is called the faculty of locomotion: that is, the power of moving at will from one place to another; others have not. Many of the bivalved shells have the property of moving backwards or forwards, by a curious little instrument that has some resemblance to a leg or foot, and is called the *tongue*. But these animals can, whenever they

please, assume almost any kind of form their wants require. They cannot make a progressive motion on the surface, that is, they cannot move forward; but they dig a hole or cell in the sand, sometimes two feet in depth, in which they ascend or descend at pleasure."

"How convenient!" said Caroline, "and how curious! This razor-fish reminds me of the lion-ant, that the travelled ant had such an escape from in 'Evenings at Home.' You know it made a little pit, and hid itself in the sand till its prey was just on the brink, and then it put out its huge pair of horns and dreadful claws, and threw a shower of sand upon its poor victim, and tried all it could to catch it. I remember wishing that I had been that lion-ant, when mamma first read that tale to me. But does the inhabitant of this long-shaped shell—*solen*, as you call it—take shell and all to the bottom of its hole?"

"Yes; the instrument or tongue by

which its motions are performed, is placed near the centre of its body. When necessary, the animal can make the end of the tongue assume the form of a ball. The razor-fish, when lying on the surface of the sand, and about to sink into it, extends its tongue from the lower end of the shell, and makes the extremity of it take the form of a shovel, sharp on each side, and ending in a point. With this instrument the animal cuts a hole in the sand. After the hole is made, it puts its tongue a little further into the sand, makes it wear the appearance of a hook, and with this hook it obliges the shell to descend into the hole. In this manner the animal continues its operations, until the shell sinks and totally disappears."

"Ah! then it is down, certainly!" said Emily. "But to rise again is no such easy matter. How does it manage that?"

"When it wishes to regain the surface, it forms the end of its tongue again into

a ball, and makes an effort to extend the whole tongue ; but the ball prevents any further descent, and the very effort occasioned by attempting it, necessarily pushes the shell upward until it reaches the surface. The dexterity and quickness with which the little animal performs these various motions is both astonishing and wonderful.”

“ But now I must leave you, for a poor woman is waiting to ask me about a ticket of admission to the Infirmary.”

“ Do not go just yet,” exclaimed Caroline, catching Emmeline’s hand, and holding it fast within her own. “ You must let me look at a multivalve before you leave me.”

“ Well, one multivalve,” said her kind friend, “ no more ; Caroline has too generous a heart to wish to keep a poor person in suspense, in order to procure gratification for herself.”

Caroline blushed. “ Go, go directly,” said she ; “ I will content myself with

knowing that shells consisting of more than two pieces are multivalves, and defer the pleasure of looking at them till you are quite at liberty."

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#### THE COMET.

"A COMET is now visible in the southwest, between nine and ten in the evening," said Mr. F. during breakfast time one morning, as he laid down the paper, in order to drink his coffee, which had stood till it was nearly cold.

"A comet, papa! a comet!" exclaimed Laura, Ellen and Anna, in a breath: "I hope it will not be a cloudy night, that we may look for it. Do you think we shall be able to see it?"

"That I cannot tell," replied their father. "It must depend upon the evening; if it be fine and favourable, perhaps you may discover it by means of the telescope from the observatory."

The Somersets looked at Emmeline, as though they scarcely comprehended what was meant by a comet.

“ I believe you mean a star with a long fiery tail,” said Caroline. “ I have heard our nurse-maid at home talk about one that was seen a year or two ago. Mamma often said she meant me to look at it ; but you know, when we lived in Russel-square, we were in the drawing-room with company just at the time the stars were shining brightly ; and, indeed, if we had looked out of the window, I do not think we should have discovered a comet when all the lamps were lit up, and the streets were so light. But will you tell me what a comet really is ?”

“ It is supposed to be what you imagine it, my dear,” replied Emmeline, “ a star with a long transparent tail, resembling a yellow flame, and it has no regular orbit of its own ; that is, it does not move as the planets do, round and round the sun, but stretches into space

thousands of millions of miles distant. At one time people were very much alarmed at the appearance of a comet, and fancied it foretold that some dreadful event was about to take place ; but I think it is a proof of increasing wisdom, that they are not so superstitious as they formerly were, when—

The illustrious stranger passing terror shed  
On gazing nations, from his fiery train  
Of length enormous.”

“ I shall be very glad to see this comet,” said Emily, “ and to tell mamma, when I write to her, that we have seen it. The study of flowers is called botany—that of shells conchology—that of minerals, mineralogy—pray what is the study of the stars called ?”

Emmeline was pleased with this question, as it gave her an opportunity of awakening the curiosity, and turning the attention of her young companions to objects most worthy of it.

“ The science that treats of the hea-

venly bodies is called *astronomy*," said she, "and of all studies, of all sciences cultivated by mankind, it is undoubtedly the most sublime, the most interesting, and the most beautiful."

"O, do give us a little lesson in astronomy," exclaimed Emily, affectionately clasping her hand; "you know how much we liked your little botanical lesson, and how fond we are become of botany; you know how much we enjoyed your little lesson in conchology. Do tell us something about the stars. Is it possible that we can ever know as much as you do about them?"

"Very possible, my love," said her kind instructress. "The knowledge of man must necessarily be limited as it relates to objects so far above his reach, and almost above his comprehension; but, nevertheless, what we do know is interesting and wonderful."

"You observed just now, that comets do not move as the planets do, regularly

round and round the sun : what do you mean by the planets ?”

“ Our sun is attended by distinct globes, which revolve round ; that is, move round and round his body at various distances,” said Emmeline ; “ thus creating the different seasons, and at the same time turning round on their own axes, which occasions day and night. These globes, that have the sun for their centre, are called *planets* ; our earth is one of them ; and the whole, I mean sun and planets together, is called the solar system. Our solar system consists of seven globes, named as they succeed each other : Mercury, Venus, Earth, Mars, Jupiter, Saturn and Herschel. All these planets are opaque bodies, and derive their light and heat from the sun.”

“ Stay one moment,” said Caroline : “ will you please to explain what is meant by *opaque* ?”

“ Solid, not transparent, without light

of their own," said Miss F. "All the planets derive their light from the sun, as I have just told you. We live in one of the planets; and you know very well, that if the sun never shone upon us, we should have neither light, heat, nor life."

"What are all the other stars that may be seen on a fine clear evening?" inquired Emily.

"They are other solar systems," replied Emmeline. "There are evidently two kinds of stars; the one very brilliant and twinkling, the others shine with a steady light. The former, or fixed stars, as they are called, shine, no doubt, like the sun, with their own light; and the others are opaque bodies, similar to the earth which we inhabit, and shine by a borrowed light; that is, by the light which they have from the sun, as we do from the light we have from our sun."

"Is it not astonishing to think that our earth, which is no less than twenty-

four thousand miles in circumference, appears only as a little twinkling star to the inhabitants of other systems!" exclaimed Laura, the "intelligent Laura," as Caroline called her.

"This is something quite new and delightful," said Emily; "but you, Miss F., have the art of making every thing delightful; and I believe, when we are settled down at Ashton Hall, we shall often wish we were at Grove Cottage. I hope Miss De Horne, the governess whom mamma has engaged for us, will be as clever as you are."

Emmeline smiled. Caroline, who had appeared in deep thought the few last moments, now exclaimed—

"What is the moon, dear Emmeline? I think I understand pretty clearly what you have already told us—but the moon can be neither a star nor a planet."

"I am glad you exert your capabilities, my dear young friend," said Miss F. "Several of the planets are them-

selves surrounded by smaller globes, which reflect the light of the sun by night. In this manner the earth is provided with the moon, which serves to reflect its light when the sun is set, and is bestowed upon us by an All-wise Creator, to guide the shipwrecked mariner, when cast upon a desert rock, in the midst of the ocean; to direct the weary and benighted traveller, and to enlighten our long winter evenings; by his command

‘ The moon, as daylight fades,  
Lifts her broad circle in the deepening shades;  
Array’d in glory, and enthron’d in light,  
And breaks the solemn terrors of the night;  
Sweetly inconstant in her varying flame,  
She changes still—another, yet the same!’

Jupiter has four such moons; Saturn has seven, and Herschel has six. By looking through a telescope, we may easily discover those of Jupiter, which appear at this distance like four little stars.”

George, the footman, now came to fetch the urn ; the tea-things were taken away, and the children summoned to attend their dancing master: but they did not leave the breakfast parlour without expressing pleasure at the idea of looking for the comet in the evening. Evening came ; but not so favourable an evening for the comet as could have been wished. By nine o'clock, the children had posted themselves at the windows of the observatory—the large telescope was placed in the proper direction, and every little eye was turned with eager avidity towards the point in which it was expected to make its appearance. But, unfortunately, the atmosphere was somewhat misty, and a few silvery clouds floating about, obscured the very constellation in which the paper had said the comet might be seen.

“ I have discovered it ! ” exclaimed Ellen, after gazing upon the starry fir-

mament for a few moments ; but Ellen was mistaken—her comet proved to be the planet Mars.

“ Ah, now I actually see it !” cried Caroline,—“ a star with a long flaming tail—there, there it is, in that direction.”

But Caroline was equally wrong in her conjecture : for her comet proved to be only the star called Dubhe, the upper pointer in the constellation of the Great Bear. Increasing clouds foretold the children that no comet would be visible that night ; and, in order to compensate for their disappointment, Emmeline turned their attention to other parts of the heavens ; described to them how the ancients had divided all the stars into different constellations, so as to distinguish and know them apart ; and that in the zodiac or part of the heavens where the sun appears to move, there were twelve of these constellations, commonly called the twelve signs of the zodiac ; that the space between the zodiac and the north

pole contained thirty-five constellations, while the regions south of the zodiac contained forty-seven constellations.

“One of the most beautiful of these clusters, or assemblages of stars,” said she, “is Orion, distinguished by his belt of three brilliant stars in a row. You must remember to ask Miss De Horne to point out the constellation of Orion to you, when you take an evening walk next winter, for on a winter’s evening it is particularly conspicuous and beautiful. Indeed they all possess beauty, and cannot fail to fill the reflective mind with feelings of admiration and awe :

“There’s nothing bright above, below,  
From flowers that bloom, to *stars* that glow,  
But in its light my soul can see  
Some feature of the Deity.”

“How pretty those lines are !” said Caroline, and she was repeating—

“There’s nothing bright above, below,  
From flow’rs that bloom, to stars that glow,”—

when she was interrupted by Emily, who

had been looking at a book which Miss F. held in her hand."

"Ferguson's Astronomy," said she :  
 "is that the same Ferguson of whom  
 there is such a pretty account in one of  
 our little books—in 'Buds of Genius,' I  
 believe?"

"It is," said Emmeline ; "he was a  
 very clever man, and a great astronomer ;  
 though destitute of much education, he  
 was extremely persevering in all he un-  
 dertook. His geunis was directed to  
 useful objects, and notwithstanding the  
 disadvantages under which he laboured,  
 he became a celebrated and learned man.  
 I have often told you, that perseverance  
 —a determined resolution to accomplish  
 any thing we have undertaken, will en-  
 able us to conquer every difficulty to  
 which, in the pursuit of a favourite ob-  
 ject, we may be exposed—this quality,  
 combined with the habit of observation,  
 which is of essential use in every depart-  
 ment of life, rendered Ferguson what he

was, though he never had above three months' education."

"I never saw the little book of which you were speaking, Emily," said Laura, "What does it say about Ferguson? I should like to hear, because my sister is so fond of his astronomical works."

"He was a Scotchman," replied Emily; "his father and mother were very poor, and lived at a small village in the north of Scotland. James Ferguson was a clever little fellow, and began to write books when he was only eight years old. I believe he was a shepherd-boy; he used to study the stars in the night, and in the day-time he amused himself by making models of mills, spinning-wheels, and such like things. When his day's work was done, he used to go in the fields, with a blanket wrapped round him, and lie down on the ground on his back, and measure the distances of the stars by means of a thread with little beads upon it, and in this manner he managed to find

out their different positions. After this he contrived to make a globe, although it was the first he ever saw: and then, for he never liked to be idle, he constructed a wooden clock, which kept time pretty well. I am sure he must have been very clever, for the bell on which the hammer struck the hours was only the neck of a broken bottle. One day he met a gentleman riding by the house, and he asked him to show him the inside of his watch; so when he had seen it, he made a watch himself with wooden wheels, and a whalebone spring.—Oh, how Edward laughed when he read the account of Ferguson's watch, for it was a very clumsy one, being contained in a wooden case, about as large as a breakfast tea-cup. But, poor fellow! somebody happened to let it fall, and then accidentally trod upon it, and crushed it to pieces; so he never made another, but turned his attention to the stars, I sup-

pose, and wrote the book that Emmeline has in her hand."

"I think you have repeated the account given of Ferguson in 'Buds of Genuis' very correctly, my dear," said Miss F. "He was indeed a promising 'bud,' and became in years of maturity a 'full-blown flower,' whose memory fadeth not away."

"I am confident that such a turn may be given to the early pursuits of children as will materially influence their dispositions and conduct in future life; and one important method to be pursued is, to imbue their minds in earliest infancy with the habit of observation, the habit of making remarks, of paying attention to those *little circumstances*, to those simple causes and effects, which are too apt to pass unnoticed and unrecorded. Sir Isaac Newton, the greatest philosopher England has ever known, and whose illustrious name will to latest ages adorn

the roll of history, made some of his greatest discoveries in consequence of a train of thought first suggested by seeing an apple fall from a tree, as he was sitting in an orchard one fine summer morning: a fact which had been witnessed for thousands of years, and might have been for ever observed by ordinary minds, without leading to any important result. But with Newton it was far otherwise: when he had once asked himself the question, "*Why* does it fall?" his thoughts were directed by a chain of reasoning, as simple as it was accurate, until he had laid the mighty scene of nature open to our view, and unveiled the law of *attraction*, by which not only atoms, but worlds are combined into one harmonious whole.

But I must leave this subject till you are a little more versed in astronomy.

Galileo, a native of Italy, to whom we are indebted as the inventor of the telescope, an instrument which enables the

human mind to penetrate into very remote regions of space, and far beyond the limits which nature has assigned, had his attention first awakened to the subject by hearing that some children of a Dutch spectacle-maker, being at play with some spectacle glasses, made use of two of them together, the one convex and the other concave, in looking at the weather cock of a church, and observed that it appeared much nearer and larger than usual. When the celebrated Galileo heard of the circumstance, he conceived the idea of applying it to astronomical purposes, and was thus led to the actual invention of the telescope: for, with that ingenuity for which he was so remarkable, he constructed one by fitting some large glassess to the pipes of an organ. His telescope magnified more than thirty times, and all the advances made in astronomy after this period were the easy and natural consequences of his invention. He himself discovered the four

satellites or moons of Jupiter, and also that the sun is the centre of our solar system, as well as many more interesting facts before unknown. Thus, you see, my dear young friends, that when we reflect upon the *means* by which discoveries have been effected, we cannot fail to be forcibly struck with the circumstance, that the most important consequences have often been the result of the most *trivial* accidents.

“ But it is past your usual bed-time : I must wish you good-night.”

The children took leave of Emmeline with fond affection.

“ Although we have not seen the comet,” said Caroline to Laura, “ we have learned *something useful*.”



#### THE FLOWERING RUSH.

SUMMER is in its prime ; the parrot flocks  
Darken the passing sunshine on the rocks ;

The chrysomel and purple butterfly,  
Amid the clear blue light are wandering by ;  
The humming bird, along the myrtle bowers,  
With twinkling wing, is spinning o'er the flowers ;  
And all the farther woods and thickets ring,  
So loud the cureu and the thenca sing.

Checkering with partial shade the beams of noon,  
And arching the grey rock with wild festoon ;  
Here its gay net-work and fantastic twine,  
The purple cogul threads from pine to pine :  
And oft, as the fresh airs of morning breathe,  
Dips its long tendrils in the stream beneath.  
There, through the trunks with moss and lichens white,  
The sunshine darts its interrupted light :  
And 'mid the cedar's darksome boughs illumes,  
With instant touch, the lori's scarlet plumes.

“ How beautiful these lines are !” said Caroline, as she repeated them aloud one delightful afternoon, while seated at the open window of the drawing-room. “ Though they describe a scene in South America, a valley near the Andes, yet I could fancy that, with some little alteration, they might be applied to this lovely place. Look at those venerable oak trees.”

Where, through the trunks, with moss and lichens white,  
The sunshine darts its interrupted light.

“ Caroline is becoming quite poetical!” said Mrs. F. “ But where are the humming-bird in its myrtle bowers, the cureu, and the thenca, and the purple cogul?”

Caroline smiled. It appeared that she had learned the verses because she liked their sound; but that she had never properly understood them. We believe this to be the case with many young people of Caroline’s age: their attention is caught by the sound of agreeable poetry, and they learn to repeat it by heart; not for the beauty of the description or the subject, but merely because it pleases the ear, and gives rise to agreeable sensations.”

“ What is meant by the *chrysomel*, my dear?” said Mrs. F.

Caroline blushed, and replied, “ Perhaps it is an insect, ma’am; I do not know, but I liked those two lines because they are so pretty.

The chrysomel and purple butterfly,  
Amid the clear blue light are wandering by."

"The chrysomel is a beautiful insect of which the young women of Chili make necklaces," said Mrs. F. "Then the humming-bird: I need not describe that: you know already that it is an elegant little creature, and obtains its name from the humming sound its twinkling wing causes in the air. Then the *cureu* and the *thenca*."

Caroline was again at a loss, and wished she had asked Emmeline what they were. "But they are certainly birds," said she, "because they sing."

"Yes, they are birds of Chili," said Mrs. F., "remarkable for the sweetness, melody and richness of their notes. The *thenca* is supposed to be a species of the Virginian thrush (*turdus polyglottus*), called the four-hundred tongues, from the variety of its notes. And now for the 'purple cogul?'"

This puzzled Caroline more than either of the preceding questions, and she again wished she had applied to Emmeline. “Mrs. F. must think me uncommonly ignorant,” said she to herself; “she heard me admiring those beautiful lines, for beautiful they certainly are; and now she imagines that I repeated them by rote, like a parrot, without even knowing their meaning. I will never again learn poetry that I do not understand.”

We have reason to believe that Caroline kept her resolution; and we wish that all our young friends would, in this respect, follow her example.

“The cogul is a most beautiful climbing plant,” said Mrs. F. “Its long stalks and tendrils are extremely slender, of the size of packthread; it climbs on the trees without attaching itself to them, as ivy does: when it reaches the top it descends perpendicularly; and as it continues to grow, it extends itself from

tree to tree, until it offers to the eye a confused tissue, forming some resemblance to the rigging of a ship.”\*

Just as Mrs. F. was giving Caroline this description of the cogul, a group of gay little girls burst into the room.

“Dearest Caroline, are you not ready? The pony carriage is at the door—here is your parasol, we thought you were waiting for us; do run and put on your hat as fast as you can.”

Caroline had been so much engaged with the poem she was learning, as nearly to have forgotten that they were going to have a *fête-champêtre* at a rural cottage about three miles off. The land around this cottage belonged to Mr. F.’s estate, and was occupied by one of his tenants; it was just hay-making time, the fields were to be cleared—the last loads carried away this very evening; therefore the children wished to be present, in order to enjoy for the last time the delightful

\* Molina.

fragrance of the new-made hay, and arrangements had accordingly been made for them to drink tea at the cottage.

The pony-chaise was to accompany them, that they might walk and ride alternately ; when one was fatigued with walking, she might ride, and when another was weary with riding, she might walk.

Caroline was ready in a few moments ; the chaise was at the steps, the tin-box for flowers—for they had become great botanists,—was placed under the seat ; and Laura, Emily, and Augusta, who were to ride the first mile, were soon seated in it. Little Lucy, being considered too young for the excursion, was left at home ; so Caroline, Anna, and Ellen walked on, followed by a nursemaid, to take care of Augusta and George, who carried a basket upon his arm, filled with milk, plum-cake and fruit.

The evening was delightful : Caroline fancied even more delightful than an

evening spent in the valley, so beautifully described in the lines she had been repeating. The vocal choristers of the grove carolled their lays of love, or seemed anxious that their melodious notes should ascend in grateful praise to heaven ; the rook rocked itself upon the light and flexible bough of the tall ash ; and all the little feathered tribe warbled songs of joy, which filled the air with gladness. The wreaths of roses and wood-bines in the hedges vaunted their gay clusters, and diffused a balmy fragrance. The new made hay-rick—the waggons slowly passing along—the shouts of children—and the joyful voices of the hay-makers, as they were finishing the last loads, gave an air of life and animation to the scene.

At length our little party reached the destined cottage ; and having left the chaise, and begged that tea might be ready by six o'clock, they proceeded towards the hay-field, to ramble about at pleasure.

Emily carried the tin-box: and when they had enjoyed themselves for some time among the new made hay, and the younger ones had played many infantile freaks with each other, they reached a little stream at the farther end of Mr. F.'s meadows, and began to look for flowers. Some beautiful white water-lilies first attracted their attention, but these they could procure nearer home; they rambled on, and presently some majestic flowers, of a yellow colour, were seen.

“Ah,” said Caroline,—

“On its soft breast the wand’ring stream  
Reflects the flag-flower’s golden gleam.”—

“However, these we can find in the brook at the bottom of the park, so it is not worth while to crowd our tin-box with plants we can get at Grove Cottage. But what is that tall, elegant plant yonder, with a large umbel of pink flowers?—oh, I know what it is—is it not uncommonly

beautiful? Do you remember the lines that Emmeline repeated, when she was describing it to us?

“Her rosy umbels rears the *flowering rush*,  
While with reflected charms the waters blush.”

“We must get it, indeed we must.”

“But that is impossible, quite impossible,” said Laura. “It is in the middle of the stream. Do not attempt it, Caroline.”

“Lend me your parasol, my love,” said she, forgetful of the danger to which she was exposed, “I will procure it if I can; it is so very beautiful, and perhaps we shall never see another.”

In endeavouring to reach it, the little tuft of soft earth upon which Caroline stood gave way, and she would inevitably have fallen in, had not Emily and Laura, who stood close by her, caught hold of her frock, and rescued her from the perilous situation in which she had placed herself; but, notwithstanding the

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danger to which she had been exposed, her wish to gain the flowering rush still overcame her prudence : for when the other children, convinced that the attempt was fruitless, and fully believing that their companion was aware of the danger, had rambled forwards by the side of the brook, in search of a similar one, she determined, if possible, to procure the object in view, beckoned to a little boy, who was seated under a haycock munching a great piece of bread and cheese, to bring her a rake that was lying on the ground at a little distance. He came forward in a moment :

“ Let me reach it for you, miss,” said he. “ Is it that tall, red thing ? Oh, I can reach it very well : don’t you come too near the water’s edge, ma’am, I will soon give it to you.”

But the good-natured little fellow happened to place his foot upon the same deceitful clod on which Caroline had stood ; it would not bear another pres-

sure, but gave way, and precipitated him into the stream.

Caroline's screams brought the other children back in a few moments, and their united shrieks had, in a very short time, collected several of the haymakers together. One man, in whose countenance distress was strongly depicted, threw off his jacket in a moment, plunged into the stream, caught the body of the child, apparently in a senseless state, again reached the river's side, and, by clasping his arm round the trunk of an old willow that drooped over the water, and the aid of one of the men, he regained the dry land, and hastened with his child towards the cottage. The news had already reached it: a warm bed was prepared, and medical assistance procured almost immediately; as fortunately Dr. ———, in returning to Egremont from one of his daily rides, happened to pass by the cottage just as the accident took place. Indeed such prompt measures

were taken, such excellent means used, that in the course of half an hour the little William breathed freely, opened his eyes, and looked around, at first scarcely knowing where he was ; but his recollection gradually returned, and he soon recalled the circumstance that had placed him in his present situation.

Poor Caroline, in the mean time, had seated herself under the willow, and was weeping so bitterly, that it seemed almost in vain to attempt to console her. She reproached herself with having forfeited the child's life ; she felt that the danger to which she herself had been exposed, ought to have warned her not to attempt to place a fellow-creature in the same situation ; she blamed her own imprudence, thought of Laura's remonstrances, of the distress of William's parents, and again she wrung her hands and wept.

“ But while the children were endeavouring to moderate her grief, a messenger came from the cottage, announc-

ing that little William was pronounced out of danger; resuscitating means had been so quickly applied, and he had been for so short a time under water, that, although for the first few minutes insensible, yet his natural recollection, strength and cheerfulness, were soon restored, though he was not allowed to rise again that evening. The children hastened towards the cottage, and found, what they had not known before, that William was the son of Mr. F.'s tenant. It was a pretty, rural habitation, overhung with flowers, and surrounded by tall trees; tea was ready, the kettle was singing on the fire, and William's mother was cutting some cake for the young ladies' tea. Caroline went towards her, took her hand in an affectionate manner, and begged to see her little boy. "He is better now, thank God," said the poor woman; "I thought, when I saw his father bring him in about an hour ago, that I should have lost him; but he is now like himself again,

and says he is only sorry he did not get the flower for the young lady."

"May I see him? may I see him and thank him, and tell him how much I regret what has happened?" said Caroline, and the tears came again into her eyes.

"Yes, madam, surely: but do not distress yourself," said Mrs. Thompson, opening the door that led up stairs, and showing Caroline, Emily, and Laura into a small but clean room, the walls of which were whitewashed, the roofs were sloping, and the bed upon which the young invalid lay was destitute of curtains: but all wore an air of comfort and neatness which delighted the Somersets, who had never before been in the chamber of a poor person. As they approached the bed, William raised himself up, smiled, and said, "I am only sorry I could not get the flower, miss: I should be glad to do any thing to oblige ye."

"Do not think any more about the flower," said Caroline, "only tell me you

forgive me for having been the cause of your accident. But I have suffered enough for my imprudence—I will never, never again be so thoughtless as to expose any one to danger for my pleasure.”

“You are very good, miss,” said William, in a grateful tone, “but indeed it was no fault of yours; and if the same were to come over again, I would do it again to please you.”

A tall, pretty looking girl, who had been sitting by the bed-side, now rose, and seeing that Caroline was agitated, gently hinted that the medical attendant had desired that William might be kept quiet that evening, and that most probably on the morrow he would be perfectly well.

Laura and her friends withdrew; and with the assurance of his speedy restoration their cheerfulness returned, and they joined the young party, who were at tea in the large open kitchen below, in good spirits.

Tea had been deferred to a later hour than was originally intended on account of the accident, and when it was done, the appointed time was come for them to set out on their return to Grove Cottage: for as those who were to walk the last mile, might shorten the distance by crossing a field or two, Mrs. F. had particularly desired them to return early on account of the dew.

The chaise was soon ready, and having said all she could to apologize for having been the cause of an accident which had, for a time, occasioned so much anxiety, Caroline placed herself by the side of Laura and Augusta, and they drove along the little winding lane towards home.

Having reached the stile that led across the fields, they gave up their place in the little vehicle to the others, and proceeded along by the foot-path. They had not walked far before Mr. F., who

had been giving directions respecting some alterations that were about to be made on his estate, overtook them.

“ Well, my dears,” said he, “ I hope you have enjoyed your little excursion?” Caroline took hold of his hand, but knew not how to speak, and Laura felt equally unable to recite what had happened. “ What has occurred?” inquired he with anxious solicitude, “ are all the children well ?”

“ Yes, papa, all are safe and well,” replied Laura, gaining resolution, “ but little William Thompson has fallen into the water.”

“ Fallen into the water !” said Mr. F., “ how was that ? Is he drowned ?”

“ No, papa ; he is getting better.”

“ Yes, he is better,” said Caroline. “ Dr. ——— thinks he will be well to-morrow,” and she now repeated, with a candour and generosity that did her credit, and not without many reproaches

for her own folly and imprudence, a circumstantial account of the event which had happened in the hay-field.

Mrs. F. was anxiously anticipating the return of the children, as the appointed hour was past, and the sun, lately so bright and glorious, was hiding itself in a mantle of mist, and bidding good-night to Grove Cottage. As soon as she perceived some of the party advancing along the carriage road towards the house, accompanied by Emmeline, she advanced to meet them. It was not long before they were made acquainted with every circumstance that had transpired in the course of the afternoon. They affectionately sympathized with the parents of the child, and agreed to go over to the farm the next morning, in order to see how he went on.

“It was entirely my own fault,” said Caroline; “Laura begged me not to attempt to gather the flower, but I wanted it so much—and when I am once deter-

mined upon an object, I seem as though I could not rest till it is accomplished—that I forgot little William was just as likely to fall into the water as myself—I forgot all about prudence, and care: however, this accident shall not be thrown away upon me, for whenever I feel inclined to give up prudence to pleasure, I will think of the *flowering rush*.”

“Caroline has a generous and affectionate heart,” said Emmeline, as her young companion ran forwards with the rest of the children, who now joined them, in order to put the plants they had brought home in the tin-box into water.

“I hope and believe, that this circumstance will make an impression upon her, which will prove of essential service in restraining her volatile disposition, and teaching her *to think before she acts*.”

On the morrow the children were dressed by six o'clock; the pony chaise was again at the door, and Emmeline and the Somersets were soon stationed in

it. On arriving at the cottage, they had the satisfaction of finding that William was already up and gone out to work, a proof that he was perfectly recovered. They congratulated his mother upon the circumstance, who appeared full of joy.

“For,” said she, “I thought I should have lost him.”

“Such an accident *might* have proved fatal,” said Caroline. “I am very grateful that it was no worse, and that the good-natured little William is so soon restored to his usual strength; and,” she again repeated, “I will never forget the flowering-rush, nor the consequences of imprudence.”

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#### THE MICROSCOPE.

ONE week rapidly succeeded another, each successive one appearing to fly with more swiftness than the last; and the time was quickly approaching for Caroline and Emily to leave Grove Cottage.

They could never think upon this subject without a mixture of regret. They knew that, under Emmeline's kind tuition, they were making rapid progress in many branches of their education ; they could apply to her at any time for advice or instruction ; she was always at hand, always ready to answer their questions. Tenderly as they loved their mother, they had not been accustomed to enjoy much of her society in London, except on an evening now and then, reserved from the daily routine of company for that very purpose : company at home and engagements abroad, added to her delicate health, had rendered her almost incapable of attending to them.

“ But it will be very different when we get to Aston Hall, for there mamma says she shall devote all her time to us, and that the drawing-room will not be crowded with company every night as it was in London,” said Emily to Caroline, one

morning as she entered the breakfast room.

Caroline was so busily engaged about something at the table, that she made no reply to what her sister had said.

“What are you doing, Caroline? what are you so very busy about?” said she, advancing towards her.

“Mr. F. has just made me a present of this microscope,” exclaimed she: “such a useful and wonderful instrument! I am looking at the wing of a peacock butterfly, and it appears a thousand times more beautiful than any butterfly I ever saw; what we have sometimes rubbed off upon our fingers, and thought it was only dust, is, in reality, feathers—the most beautiful feathers you can possibly imagine, Emily. Do look at the wing of this butterfly.”

Emily bent down to the microscope, and peeped through the glass.

“How astonishing!” said she; “in-

stead of appearing any longer like dust, they are indeed real and beautiful feathers, as rich and as soft as velvet, and surpassing even those of the peacock itself. But what else have you there? What, are you going to look at the wing of that dragon fly? I do not expect that will appear at all curious."

"O! but it does appear very curious, indeed," said Caroline, "and Miss F. is gone to fetch several other little things for us to look at. I will place this little *wee-wee* bit of the dragon-fly's wing upon the object glass, in order that you may see it." Emily looked again.

"Ha! ha! you are right," said she. "It looks like a piece of the lace trimming upon my frock. What a wonderful instrument this microscope is: it makes every thing appear so much larger than it is in reality. I think it is almost as curious an invention as the telescope. Here is Emmeline. O! Miss F. what

have you got upon that plate? Cheese! a bit of cheese! what are you going to do with cheese?"

"I have brought it in order to shew you some *mites*, my dear, by the aid of the microscope,—

Whose small convex  
Enlarges to ten millions of degrees,  
The *mite* invisible else, of nature's hand,  
Least animal: and shows what laws of life  
The cheese inhabitants observe, and how  
Fabric their mansions in the harden'd milk,  
Wonderful artists!"

"But you do not mean that there are any mites upon that piece of cheese," said Caroline, with an inquiring look.

"I do, indeed," said Miss F., as she placed the morsel of cheese upon the glass. "Now tell me what you see."

"Ah! I perceive an immense multitude of small transparent animals, of an oval shape; they have each eight scaly legs: how fast they move—now this way and now that; they all appear as busy as bees in a hive."

“The innumerable species of insects that are only discoverable by the microscope,” said Emmeline, “afford an unceasing source of entertainment and instruction to the admirer of nature’s minutest works. The whole earth is replenished with an inexhaustible store of what we should least expect; an infinite number of animalcula float in the air we breathe, sport in the water we drink, cover every leaf, and adhere to every object upon which we turn our eyes. Even the bloom of a plum consists of innumerable insects, so that when we rub it off, we destroy thousands of living animals. No product of nature is unpeopled by others of its creatures; all attest the wisdom that gave them birth.”

“Here is a mallow!” exclaimed Anna, running into the room with a pink flower in her hand, “I have been fetching it out of the lane, on purpose that Caroline might look at the dust—the farina I

mean—upon the anthers or top parts of the stamina.”

“How very curious!” said Caroline, when she had looked through the glass for a moment. “Each little particle of farina is toothed like the wheels of a watch—so perfect, so exact!”

“The farina of flowers is found to be regular and peculiar to the plant that produces it,” said Emmeline. “That of the mallow is a little round ball, surrounded by an edge, which makes it look, as you say, like the wheel of a watch. Now look at the farina of this tulip?”

“Ah! that is quite of a different form—it looks like the seeds of a cucumber.”

“Now for the farina of the poppy.”

“Wonderful! it looks like grains of barley, and a little groove runs across every grain.”

“The most minute parts of nature are finished with an elegance that far sur-

passes the finest efforts of art," said Emmeline.

"Do you think so?" said Caroline. "I thought that *some* of our most beautiful manufactures were as nicely finished as some of the productions of nature."

"I believe I can soon convince you to the contrary," said Emmeline, rising and going towards her work-box. "Let us take a needle, for instance; I suppose you will allow that a very fine little needle is one of the most highly-finished productions of art."

"Yes, certainly," said Caroline, "I do allow it."

"Now look at it," said Miss F.

"Is it possible! is it possible that this great clumsy thing can be the fine little needle with which you were working Lucy's cap? The point looks quite blunt, and more like a peg broken at the end, than a fine sharp-pointed steel needle."

Emily looked also, and agreed with

her sister, that it was scarcely possible to imagine the needle in the microscope the same needle as that with which Emmeline had been at work.

“Now observe the edge of my pen-knife,” said Miss F. “Its highly-polished steel-blade is the effect of art.”

“It appears more like the back of a large carving knife,” said Emily, “than the blade of a fine set pen-knife; it is very rough and full of irregularities. How different from the nicety with which the wing of the butterfly and the farina of the mallow are finished! I see you are right; but you are always in the right.”

“I wished to convince you,” said Emmeline, “that the works of art, when brought to the highest degree of perfection, will not do to compare with the operations of nature. Those of the latter, when exposed to the microscope, far from losing their lustre and their polish, assume more beauty, regularity, and

order. The microscope is an avenue to unseen glories in new worlds, and makes us acquainted with millions of living creatures of which we had never before formed an idea.

“I should like you to look at a drop of vinegar through the magnifying glass,” continued she, ringing the bell, and desiring the servant to bring some in a saucer, which had been previously exposed to the air for a short time.

Emmeline placed a drop of this vinegar, by means of a camel’s hair-brush, on the transparent object plate of the microscope.

“Now, my dear Caroline,” said she, “tell me what you see.”

“Oh, little animals! little animals somewhat resembling eels! How they are moving about; leaping over each other, and enjoying themselves as much as the gold fish do in the fish-pond, when the sun shines. How astonishing, that there should be hundreds of insects in

that little drop of vinegar—animalcula, as you call them—and yet they seem to have as much room to move about as if they were in a large fish-pond. What a curious contrivance this microscope is! Who would have had any idea that nature was so full of life as it is! or that the bloom of a plum, or the down of a nectarine, is composed of minute insects, all of which are formed in as perfect a manner as the animals we are accustomed to see with the naked eye. Emmeline, will you repeat those lines you were translating for Anna, the other morning.”

“ Author of all ! How bright thy glories shine !  
How pure, how perfect is thy least design ! ”

“ They are particularly *d-propos* to our present subject,” said Emmeline, “ for we do indeed discover perfection in the smallest, the most insignificant works of nature : perfection which those who do not accustom themselves to the *habit* of

*observation*, a quality that I have often recommended to you, would pass by unnoticed.

“But I have not yet exhausted my little store of little objects. I am now going to place the horns or antennæ of a tiger-moth upon the glass. You see how small they appear to the naked eye—now look at them.”

“Ah, they are magnified indeed!” exclaimed Caroline. “They are more regular, more perfectly formed than the most beautiful feathers I ever saw in my life: and so large—quite as large as a goose-quill—but what have you next?”

“The leaf of a stinging nettle.”

“A stinging nettle!” exclaimed Emily, in a tone of surprise. “I did not know that the leaves of stinging nettles were covered with long sharp pointed spikes like these; and they all terminate in little balls upon the leaf.”

“Those little balls or globules are bags containing the poison, which occa-

sioned you so much pain when you were gathering flowers in the lane, the other morning. Each little bag is full of poisonous juice, and when they are pressed, this juice is forced up the spikes or stings, and occasions those disagreeable sensations which I dare say you will in future carefully guard against.

“I have brought some particles of sand to shew you. There are two sorts of sand : the calcareous, and the vitrifiable : the calcareous you may observe, appears like large irregular fragments of rock ; but the vitrifiable seems to resemble so many rough diamonds glittering in the sun-beams.”

“How wonderful ! how astonishing ! how curious !” said Caroline, “I must thank Mr. T. again for his kind and useful present, for it has put my thoughts into a new train, and given me many fresh ideas. I never mean to walk out again without bringing home some object to examine through my microscope.

How delighted Edward will be with it ; for he is as fond of admiring the beauties of nature as I am now become."

Caroline was just asking Emmeline to shew her something else, when she was interrupted by the entrance of Mr. F., with a letter in his hand.

" This letter, my dear Caroline, is for you," said he. " I have just received one from your father ; and, sorry as we shall be to part with you, much as we shall regret your absence ; yet I trust that the beauties of Aston Hall will soon compensate for those of Grove Cottage."

" But where shall we find another Emmeline—another Laura, Anna and Ellen !" said Caroline, with emotion, as she advanced to receive the letter. The seal was presently cut open—she seated herself upon the sofa, and her colour came and went as she hastily glanced at its contents.

" Papa is coming next week," said she, as she put it into Emily's hand.

“ This is Friday, and we have only a few days to stay with you—only a few more days to pass at the place where we have spent the happiest hours of our life. Miss De Horne is already at Aston Hall, and mamma and the little ones are there also : so we are not to go to Matlock, but to return direct through Manchester and Birmingham to Worcester. I want very much to see my dear mamma : but then to leave you—you, who have been so kind and so good to us !”

The tears came into Caroline's eyes, and she threw herself into the arms of Emmeline, who led her out of the room in order to compose herself.

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## THE LAST EVENING.

CAROLINE and Emily had no time to lose. Tuesday was the day fixed upon for their departure from Grove Cottage, and their father had announced his in-

tention of arriving there on the preceding evening. Three days was a very short time for them to accomplish all they wished ; for, amidst the bustle of preparation, they had many favourite spots to re-visit, many walks to retrace, and many poor people to take leave of, with whom they had formed an acquaintance during their residence in Cumberland.

“ The word *last* is certainly a melancholy word,” said Laura, as she was wrapping Caroline’s colours in silver paper, and arranging them in her drawing box ; “ but you must not fancy that this is the last time we shall ever see each other. Mamma says that perhaps we shall pay you a visit at Aston Hall next summer, if we go to Aberystwith ; and besides you will, no doubt, come to Grove Cottage again before very long ; and you know we can write to each other. You must write nice long letters, Caroline, and tell us how you are going on ; how you like Miss De Horne, and

whether Aston Hall is as pretty a place as you expected, and what progress you make in astronomy ; whether you have discovered the comet, and how you get on with botany ; how many plants you have dried, and whether any flowering-rushes grow in your streams."

At the recollection of the flowering-rush, Caroline smiled.

"I shall never forget little William Thompson," said she ; "but we must go and take leave of him, my dear Laura, indeed we must. Is the pony chaise at liberty ? cannot we take a ride to the farm before dinner ?"

"I am afraid William would be gone out to work," replied Laura ; "but if you like we will go in the evening, and make the best use of our time, by calling on some of the poor people in the village now."

"That will be by far the best plan," said Caroline, rising from her seat, "though I cannot say I much wish to

visit the pretty cottages by which we have so often rambled, and where we have so often been, and to think that I am to visit them no more."

"You must not say so," exclaimed Laura with affectionate earnestness. "Let us at least indulge the hope that we shall meet again. Even if that hope should not be realized, we shall have had pleasure in the anticipation."

Emily met her sister in the gallery, and they went together towards their own room to equip themselves for the walk, and to fetch some baby linen which they had reserved as a parting gift for some of the poor people. This benevolent distribution seemed to revive their spirits, and they repaired to the parlour with countenances as smiling as ever.

Their three companions, Laura, Anna and Ellen, were ready as usual, and they had soon left the park, and were on their way to Sally Moss's cottage.

“Do not let us forget to call on the old man in the lane,” said Emily, “the good-natured old man who took the bit of packthread, with which his carnation was tied up, to make a string for my patten the other day, when he saw I could not wear it because the ribbon was broken. I shall often smile when I think of that good-natured old man; and I shall keep that bit of string in remembrance of him.”

“Let us call there first, shall we?” said Ellen, “you see we are very near his cottage.”

This proposition was readily agreed to by Ellen’s companions, and they made a little turn in the road which brought them directly to the cottage, where they found Emily’s good-natured old man at work in his garden.

“We are come to take leave of you, Thomas,” said the Somersets, advancing towards him. “We are going away from

Grove Cottage in a day or two, and we wished to speak to you once more."

"You are very good, ladies," said the old man, laying down his spade, and conducting the children to the porch before his house. "Will you please to sit down here a little while, the wood-bines smell very sweet just now; but I am heartily sorry ye're going; we shall miss ye very much, for ye've been very good to all of us poor people: however, our blessings will go wi' ye wherever ye go!" As Thomas spoke he brushed a tear from the corner of his eye; and several of the children endeavoured to hide those which had involuntarily made their appearance in their own.

"But we must not stop to sit down," said Laura, "because we have so many places to call at before dinner."

"Do stay a minute, Miss," said the old man, reaching, at the same time, a large knife from his pocket. "Let me

give the young ladies a flower or two to remember me."

Thomas began to cut the flowers forthwith, and before they had time to stop him had collected quite a handful of roses, pinks, and woodbines.

"You have gathered the very carnation that was tied up with the bit of string you were so good as to put into my patten," said Emily. "I am really sorry you have gathered it, Thomas, because I know you were taking particular pains to have a fine blossom: and a fine one it certainly is; but I wish you had not got it."

"Oh, I gathered it on purpose, miss; and if it had been a hundred times as fine I would have done the same. If your patten string had not broke just when it did, mayhap I should never 'a known ye, and the knowing o' ye and Miss F.'s is the happiest thing o' my life, and I humbly thank ye for all your goodness."

The young people, though somewhat amused at Thomas's gallantry, could scarcely refrain from tears, when they saw the poor old man repeatedly brush his own away with the corner of his coat; and, at length, having taken leave of him, they proceeded to the cottage where Sally Moss lived. Her children clung around them when they heard that they were come for the last time, with loud exclamations of sorrow. Caroline and Emily felt many of those pleasing sensations, which generous hearts alone can feel, during this little round of leave-taking visits; and it was surprising to observe with what real regret the poor cottagers parted with them; some offered them their choicest flowers; others brought fruit; and one little girl, whom Caroline had assisted Laura in teaching to read, brought a work-bag, which she said she had made on purpose for Miss Somerset. All wished them a safe and

happy return to their own home, and, like old Thomas, "blessings wherever they went!"

Such are the pleasures of benevolence!

Pleasures springing from so pure a source are far, very far superior to any that the world can offer, because they originate *in ourselves*, and the exquisite consciousness of *deserving* praise cannot, to the truly good mind, be otherwise than productive of satisfaction.

After tea our young party took a ride, as agreed upon, to the farm. William was fortunately at home, and Caroline and Emily presented him with a handsome Bible, begging him to accept it in remembrance of the event by which they had first become acquainted.

The parting scene was affecting; but, as Mrs. Thompson observed, "in this world we must expect separations."

Saturday passed away, and Sunday

was as quickly gone. Monday evening soon came, and the children stationed themselves at the park gates in anxious expectation of Mr. Somerset's arrival. At length his chaise appeared in sight, just rising above the brow of the long hill upon the Egremont road; he drove rapidly towards them, the servant in waiting held his horse, he alighted at the gates, and Caroline and Emily were immediately in his arms.

Joy at first rendered them incapable of speaking, for although they were sorry to leave the delightful residence which was now become as a home to them, they were naturally rejoiced to see their kind and indulgent father, after so long an absence. Numerous inquiries succeeded the first embraces, numerous questions were asked, and numerous answers given. When their emotions of pleasure were a little subsided, and when tea was over, the children and their pa-

rents sauntered around the grounds belonging to Grove Cottage. Caroline and Emily, with feelings they had never before experienced, retraced the broad nut-tree walk where the charity-girls had sang in chorus on Anna's birth-day : visited the conservatory, the hot-houses, and the green-house, and took a last look at their favourite plants : paid another and another visit to their little gardens, which were now gay with the annuals they had planted ; took one peep at the aviary, and another at the swans in the fish-pond ; and felt no inclination to return to the house, till the breezes of evening blew coolly around them, and the supper bell was heard.

We shall not attempt to describe the parting scene : the fertile imaginations of our young readers will easily picture the mutual embraces that took place, the many assurances of affection and

friendship that were uttered — and, above all, the promise never to forget the happy months they had spent together at GROVE COTTAGE.

THE END.

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LONDON:

PRINTED BY COX AND BAYLIS, GREAT QUEEN-STREET.



